					DEPARTMENT	COE NA	OF UTAH TURAL RESI GAS AND M				AMENI	FC DED REPOR	RM 3		
		АР	PLICATION I	FOR PE	RMIT TO DRILL					1. WELL NAME and N		-10-9-17			
2. TYPE O	F WORK	DRILL NEW WELL	REENTE	ER P&A W	VELL DEEPEN	WELL (	)			3. FIELD OR WILDCAT		NT BUTTE			
4. TYPE O	F WELL	Oi	I Well C	Coalbed M	Methane Well: NO					5. UNIT OF COMMUNITIZATION AGREEMENT NAME GMBU (GRRV)					
6. NAME C	OF OPERATOR		NEWFIELD PR	ODUCTIC	ON COMPANY					7. OPERATOR PHONE 435 646-4825					
8. ADDRE	SS OF OPERAT	OR			n, UT, 84052				$\neg$	9. OPERATOR E-MAIL	-	ewfield.co	m		
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)  11. MINERAL OWNERSHIP (FEDERAL, INDIAN, OR STATE)							) STATE (	) FEE	5	12. SURFACE OWNERS		STATE		EE (C)	
13. NAME OF SURFACE OWNER (if box 12 = 'fee')								J 1220	_	14. SURFACE OWNER			~~		
									16. SURFACE OWNER	R E-MAIL	(if box 12	= 'fee')			
18. INTEND TO COMMINGLE PRODUC							PRODUCTION	N FROM	-	19. SLANT					
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')  MULTIPLE FORMATIONS  YES (Submit Commingling Appl							ıling Applicati	ion) NO [	)	VERTICAL DIF	RECTION	AL 📵 H	IORIZON	ΓAL 💮	
20. LOCA	TION OF WELL			FOOT	AGES	QT	r-QTR	SECTION	ON	TOWNSHIP	R/	ANGE	МЕ	ERIDIAN	
LOCATIO	N AT SURFACE		4	92 FNL	656 FEL	١	NENE	15		9.0 S	1	7.0 E		S	
Top of U	ppermost Prod	ucing Zone	1	69 FNL	222 FEL	١	NENE	15		9.0 S	17	7.0 E		S	
At Total	Depth		1	79 FSL	1523 FEL	5	SWSE	10		9.0 S 1				S	
21. COUN	TY	DUCHESNE		22	2. DISTANCE TO NEA		<b>EASE LINE (F</b> 79	eet)		23. NUMBER OF ACRE		ILLING UN 0	IT		
					5. DISTANCE TO NEA applied For Drilling	or Comp		POOL		26. PROPOSED DEPTI		TVD: 594	5		
27. ELEV	ATION - GROUN	D LEVEL 5162		28	B. BOND NUMBER		000493			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 437478			LE		
					Hole, Casing										
String	Hole Size	Casing Size 8.625	0 - 300	Weigh 24.0			Max Mu 8.3			Class G		Sacks 138	Yield 1.17	Weight 15.8	
Prod	7.875	5.5	0 - 6062	15.5			8.3		Pren	nium Lite High Strer	ngth	281	3.26	11.0	
										50/50 Poz		363	1.24	14.3	
					А	TTACH	IMENTS								
	VER	IFY THE FOLLO	VING ARE A	TTACHE	ED IN ACCORDAN	ICE WIT	TH THE UT	AH OIL ANI	O GAS	CONSERVATION G	ENERA	L RULES			
<b>w</b> w	ELL PLAT OR M	AP PREPARED BY L	ICENSED SUR	VEYOR O	DR ENGINEER		<b>№</b> сом	IPLETE DRIL	LING PI	_AN					
AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)							FORM	1 5. IF OPER	ATOR IS	S OTHER THAN THE LE	EASE OW	NER			
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)  TOPOGRAPHICAL MAP															
NAME Mandie Crozier TITLE Regulatory Tech									PHOI	NE 435 646-4825					
SIGNATURE DATE 03/01/2012									EMAI	L mcrozier@newfield.c	com				
	API NUMBER ASSIGNED APPROVAL 43013512660000								B	magill					
									Permit Manager						

# NEWFIELD PRODUCTION COMPANY GMBU V-10-9-17 AT SURFACE: NE/NE SECTION 15, T9S R17E DUCHESNE COUNTY, UTAH

#### TEN POINT DRILLING PROGRAM

#### 1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

#### 2. <u>ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:</u>

 Uinta
 0' – 1235'

 Green River
 1235'

 Wasatch
 5795'

 Proposed TD
 6062'

#### 3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:

Green River Formation (Oil) 1235' – 5795'

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

Location & Sampled Interval Date Sampled Flow Rate Temperature

Hardness pH

Water Classification (State of Utah)

Dissolved Iron (Fe) (ug/l)

Dissolved Magnesium (Mg) (mg/l)

Dissolved Bicarbonate (NaHCO<sub>3</sub>) (mg/l)

Dissolved Sodium (Na) (mg/l)

Dissolved Carbonate (CO<sub>3</sub>) (mg/l)

Dissolved Chloride (Cl) (mg/l)

Dissolved Sulfate (SO<sub>4</sub>) (mg/l)

Dissolved Total Solids (TDS) (mg/l)

RECEIVED: March 01, 2012

#### 4. PROPOSED CASING PROGRAM

a. Casing Design: GMBU V-10-9-17

Size	l	nterval	\\\\oight	Grade	Counling		Design Factors			
Size	Тор	Bottom	Weight	Grade	Coupling	Burst	Collapse	Tension		
Surface casing	0'	300'	24.0	J-55	STC	2,950	1,370	244,000		
8-5/8"	0	300	24.0	J-55	310	17.53	14.35	33.89		
Prod casing	0'	6 060	45.5	1.55	LTC	4,810	4,040	217,000		
5-1/2"	0'	6,062'	15.5	J-55	LTC	2.49	2.09	2.31		

#### Assumptions:

- 1) Surface casing max anticipated surface press (MASP) = Frac gradient gas gradient
- 2) Prod casing MASP (production mode) = Pore pressure gas gradient
- 3) All collapse calculations assume fully evacuated casing w/ gas gradient
- 4) All tension calculations assume air weight

Frac gradient at surface casing shoe = 13.0 ppg
Pore pressure at surface casing shoe = 8.33 ppg
Pore pressure at prod casing shoe = 8.33 ppg
Gas gradient = 0.115 psi/ft

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

b. Cementing Design: GMBU V-10-9-17

Job	Fill	Description	Sacks ft <sup>3</sup>	OH Excess*	Weight (ppg)	Yield (ft³/sk)	
Surface casing	300'	Class G w/ 2% CaCl	138	30%	15.8	1.17	
Ourrace casing	300	01833 0 W/ 270 0801	161	30 70	15.0	1.17	
Prod casing	4.062'	Prem Lite II w/ 10% gel + 3%	281	30%	11.0	3.26	
Lead	4,062	KCI	915	30%	11.0	3.20	
Prod casing	2,000'	50/50 Poz w/ 2% gel + 3%	363	30%	14.3	1.24	
Tail	2,000	KCI	451	30%	14.3	1.24	

<sup>\*</sup>Actual volume pumped will be 15% over the caliper log

- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
- Compressive strength of tail cement: 2500 psi @ 24 hours

Hole Sizes: A 12-1/4" hole will be drilled for the 8-5/8" surface casing. A 7-7/8" hole will be drilled for the 5-1/2" production casing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

#### 5. <u>MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL</u>:

The operator's minimum specifications for pressure control equipment are as follows:

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to **Exhibit C** for a diagram of BOP equipment that will be used on this well.

#### 6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

From surface to ±300 feet will be drilled with an air/mist system. The air rig is equipped with a 6 ½" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about ±300 feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

Newfield Production will **visually** monitor pit levels and flow from the well during drilling operations.

#### 7. **AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

#### 8. <u>TESTING, LOGGING AND CORING PROGRAMS</u>:

The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 300' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +-. A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

#### 9. <u>ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE</u>:

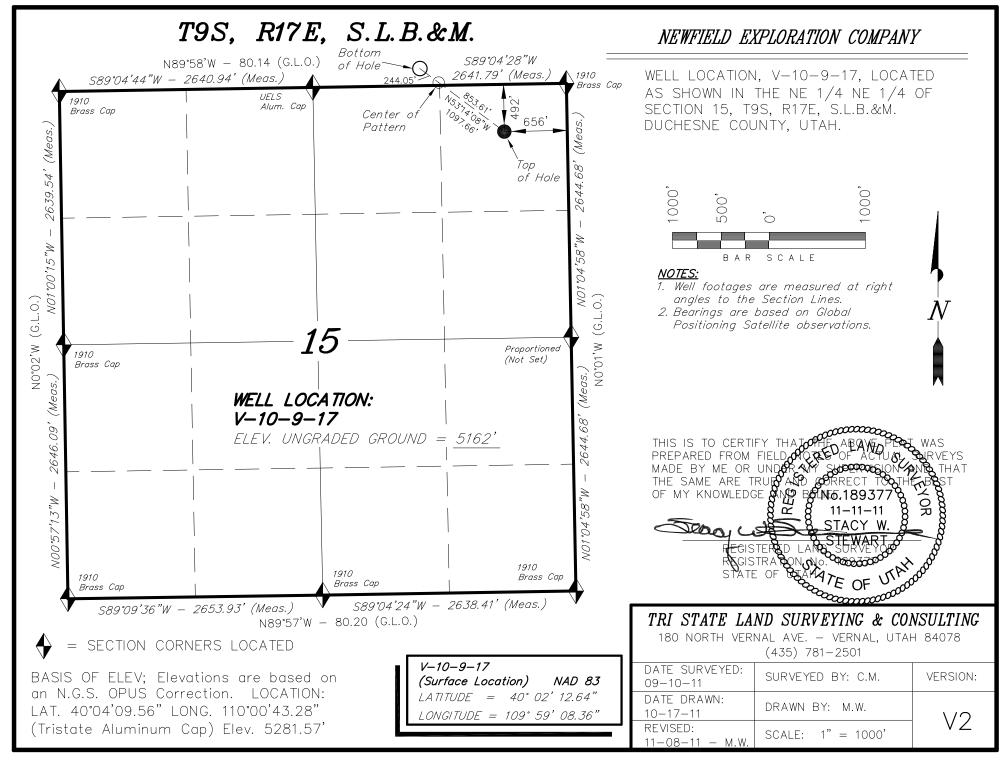
No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated

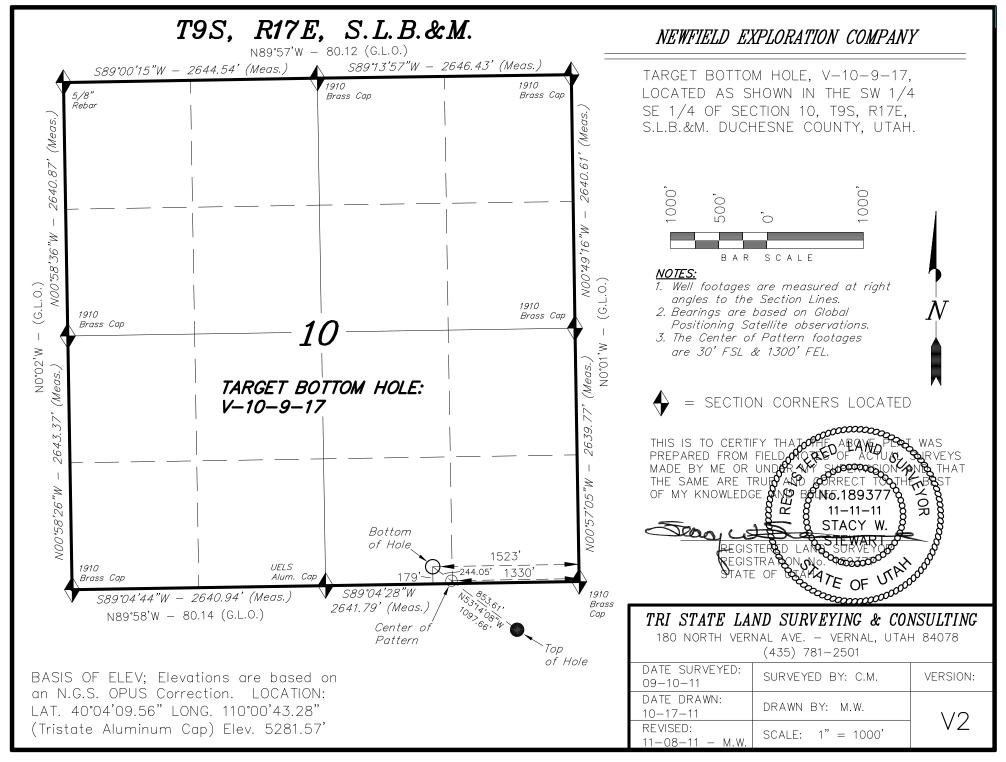
bottomhole pressure will approximately equal total depth in feet multiplied by a  $0.433~\mathrm{psi/foot}$  gradient.

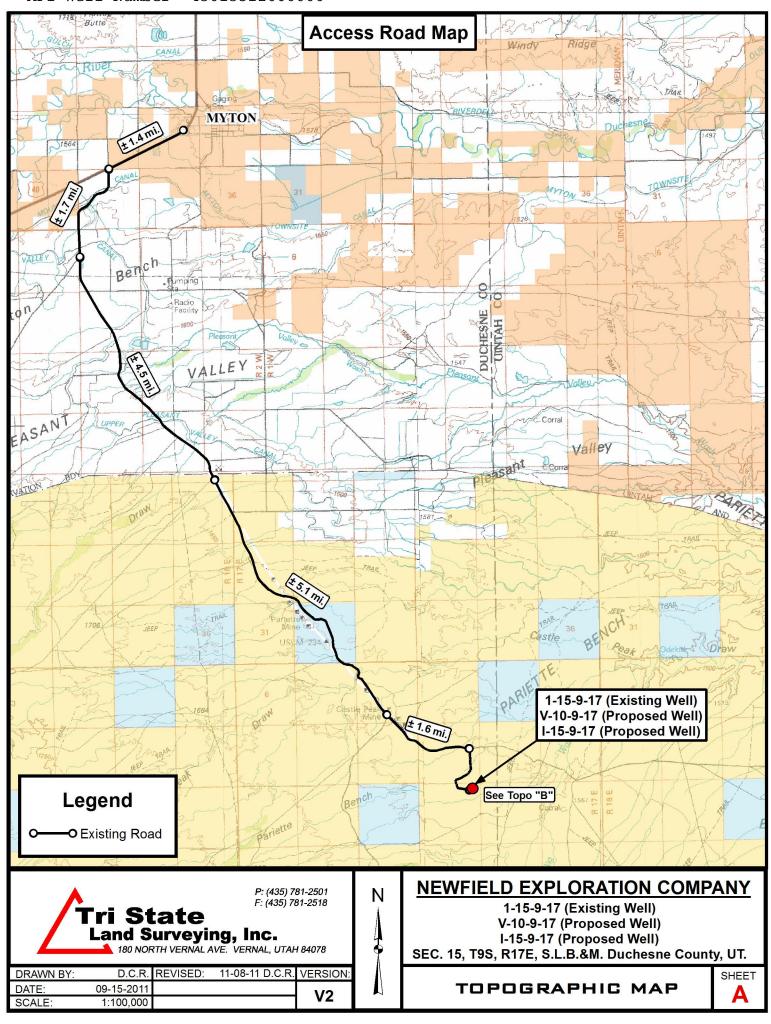
#### 10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:

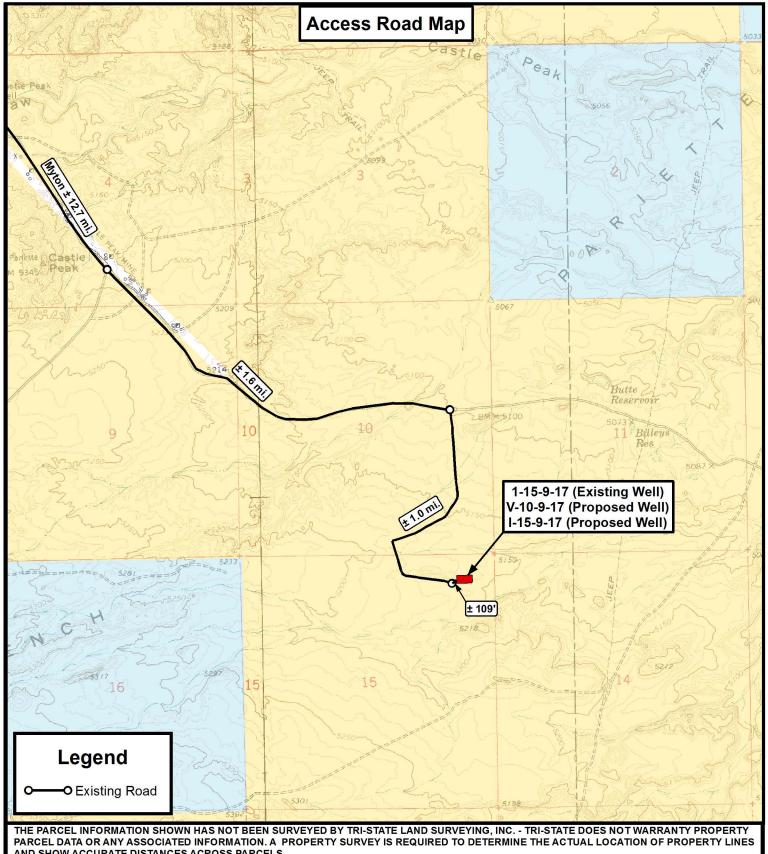
It is anticipated that the drilling operations will commence the third quarter of 2012, and take approximately seven (7) days from spud to rig release.

RECEIVED: March 01, 2012

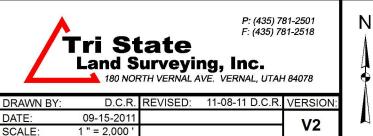








AND SHOW ACCURATE DISTANCES ACROSS PARCELS.

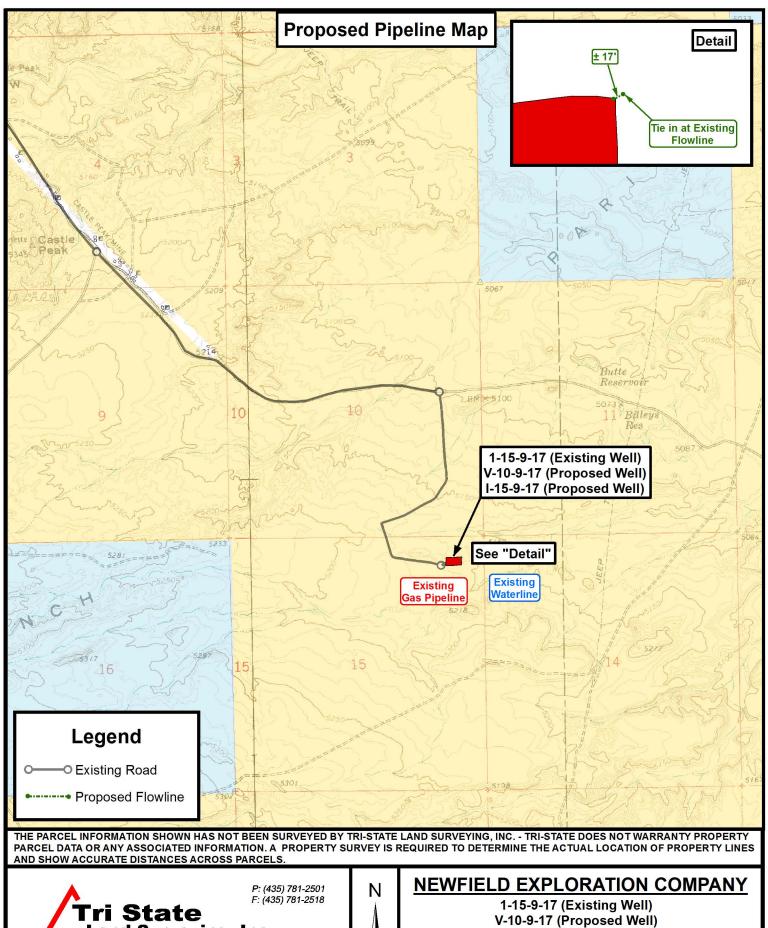


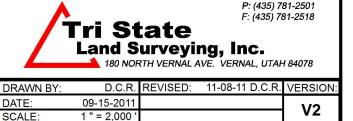
## **NEWFIELD EXPLORATION COMPANY**

1-15-9-17 (Existing Well) V-10-9-17 (Proposed Well) I-15-9-17 (Proposed Well) SEC. 15, T9S, R17E, S.L.B.&M. Duchesne County, UT.

TOPOGRAPHIC MAP



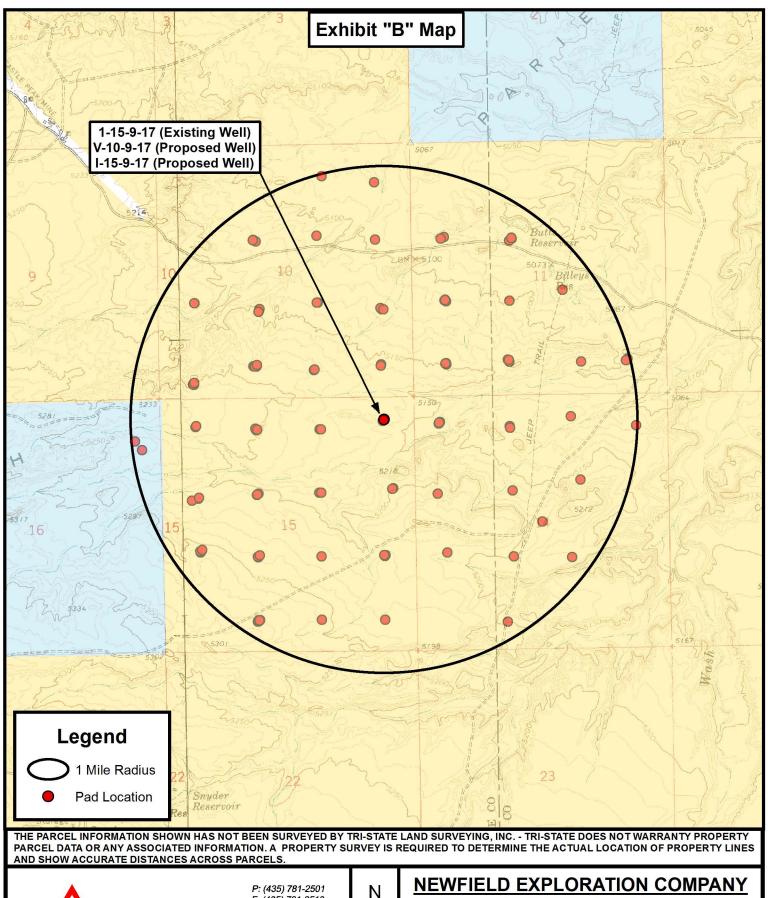


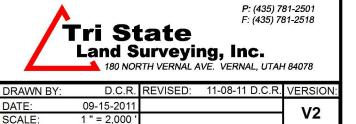


1-15-9-17 (Existing Well)
V-10-9-17 (Proposed Well)
I-15-9-17 (Proposed Well)
SEC. 15, T9S, R17E, S.L.B.&M. Duchesne County, UT.

TOPOGRAPHIC MAP

SHEET





## **NEWFIELD EXPLORATION COMPANY**

1-15-9-17 (Existing Well) V-10-9-17 (Proposed Well) I-15-9-17 (Proposed Well) SEC. 15, T9S, R17E, S.L.B.&M. Duchesne County, UT.

TOPOGRAPHIC MAP





# **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 15 T9S R17E V-10-9-17

Wellbore #1

Plan: Design #1

# **Standard Planning Report**

27 September, 2011





#### PayZone Directional Services, LLC.

Planning Report



EDM 2003.21 Single User Db Database: Company: **NEWFIELD EXPLORATION** Project: USGS Myton SW (UT) Site: SECTION 15 T9S R17E

Well: V-10-9-17 Wellbore: Wellbore #1 Design: Design #1

**Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well V-10-9-17

V-10-9-17 @ 5174.0ft (Newfield Rig) V-10-9-17 @ 5174.0ft (Newfield Rig)

Minimum Curvature

USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA Project

US State Plane 1983 Map System: North American Datum 1983

Geo Datum:

Map Zone: **Utah Central Zone** 

Mean Sea Level System Datum:

Site SECTION 15 T9S R17E, SEC 15 T9S, R17E

7,182,997.99 ft Northing: 40° 1' 46.007 N Site Position: Latitude: Lat/Long Easting: 2,062,000.00 ft 109° 59' 39.695 W From: Longitude: **Position Uncertainty:** 0.0 ft Slot Radius: **Grid Convergence:** 0.96

V-10-9-17, SHL LAT: 40 02 12.64 LONG: -109 59 08.36 Well

**Well Position** +N/-S 2,694.6 ft Northing: 7,185,733.50 ft Latitude: 40° 2' 12.640 N +E/-W 2,437.3 ft 2,064,391.32 ft 109° 59' 8.360 W Easting: Longitude:

**Position Uncertainty** 0.0 ft Wellhead Elevation: 5,174.0 ft **Ground Level:** 5,162.0 ft

Wellbore #1 Wellbore Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (°) (°) (nT) 65.80 IGRF2010 2011/09/27 11.24 52,251

Design	Design #1					
Audit Notes:						
Version:		Phase:	PROTOTYPE	Tie On Depth:	0.0	
Vertical Section:		Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
		4,850.0	0.0	0.0	306.76	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,437.7	12.57	306.76	1,431.0	54.8	-73.3	1.50	1.50	0.00	306.76	
4,940.6	12.57	306.76	4,850.0	510.9	-683.9	0.00	0.00	0.00	0.00	V-10-9-17 TGT
6,062.5	12.57	306.76	5,945.0	656.9	-879.4	0.00	0.00	0.00	0.00	



#### PayZone Directional Services, LLC.

Planning Report



Database: EDM 2003.21 Single User Db
Company: NEWFIELD EXPLORATION
Project: USGS Myton SW (UT)
Site: SECTION 15 T9S R17E

 Well:
 V-10-9-17

 Wellbore:
 Wellbore #1

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well V-10-9-17

V-10-9-17 @ 5174.0ft (Newfield Rig) V-10-9-17 @ 5174.0ft (Newfield Rig)

True

Minimum Curvature

Design.	J								
Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	1.50	306.76	700.0	0.8	-1.0	1.3	1.50	1.50	0.00
800.0	3.00	306.76	799.9	3.1	-4.2	5.2	1.50	1.50	0.00
900.0	4.50	306.76	899.7	7.0	-9.4	11.8	1.50	1.50	0.00
1,000.0	6.00	306.76	999.3	12.5	-16.8	20.9	1.50	1.50	0.00
1,100.0	7.50	306.76	1,098.6	19.6	-26.2	32.7	1.50	1.50	0.00
1,200.0	9.00	306.76	1,197.5	28.1	-37.7	47.0	1.50	1.50	0.00
1,300.0	10.50	306.76	1,296.1	38.3	-51.2	64.0	1.50	1.50	0.00
1,400.0	12.00	306.76	1,394.2	50.0	-66.9	83.5	1.50	1.50	0.00
1,437.7	12.57	306.76	1,431.0	54.8	-73.3	91.5	1.50	1.50	0.00
1,500.0	12.57	306.76	1,491.8	62.9	-84.2	105.0	0.00	0.00	0.00
	12.57	306.76		75.9	-101.6		0.00	0.00	
1,600.0			1,589.4			126.8			0.00
1,700.0	12.57	306.76	1,687.0	88.9	-119.0	148.6	0.00	0.00	0.00
1,800.0	12.57	306.76	1,784.6	101.9	-136.4	170.3	0.00	0.00	0.00
1,900.0	12.57	306.76	1,882.2	114.9	-153.9	192.1	0.00	0.00	0.00
2,000.0	12.57	306.76	1,979.8	128.0	-171.3	213.8	0.00	0.00	0.00
2,100.0	12.57	306.76	2,077.4	141.0	-188.7	235.6	0.00	0.00	0.00
2,200.0	12.57	306.76	2,175.0	154.0	-206.2	257.3	0.00	0.00	0.00
2,300.0	12.57	306.76	2,272.6	167.0	-223.6	279.1	0.00	0.00	0.00
2,400.0	12.57	306.76	2,370.2	180.1	-241.0	300.9	0.00	0.00	0.00
2,500.0	12.57	306.76	2,467.9	193.1	-258.5	322.6	0.00	0.00	0.00
2,600.0	12.57	306.76	2,565.5	206.1	-275.9	344.4	0.00	0.00	0.00
	12.57	306.76		219.1	-273.9	366.1	0.00		
2,700.0			2,663.1					0.00	0.00
2,800.0	12.57	306.76	2,760.7	232.1	-310.8	387.9	0.00	0.00	0.00
2,900.0	12.57	306.76	2,858.3	245.2	-328.2	409.6	0.00	0.00	0.00
3,000.0	12.57	306.76	2,955.9	258.2	-345.6	431.4	0.00	0.00	0.00
3,100.0	12.57	306.76	3,053.5	271.2	-363.0	453.2	0.00	0.00	0.00
							0.00		
3,200.0	12.57	306.76	3,151.1	284.2	-380.5	474.9		0.00	0.00
3,300.0	12.57	306.76	3,248.7	297.2	-397.9	496.7	0.00	0.00	0.00
3,400.0	12.57	306.76	3,346.3	310.3	-415.3	518.4	0.00	0.00	0.00
3,500.0	12.57	306.76	3.443.9	323.3	-432.8	540.2	0.00	0.00	0.00
3,600.0	12.57	306.76	3,541.5	336.3	-450.2	561.9	0.00	0.00	0.00
3,700.0		306.76	3,639.1	349.3	-450.2 -467.6	583.7	0.00		
	12.57		,					0.00	0.00
3,800.0	12.57	306.76	3,736.7	362.3	-485.1	605.5	0.00	0.00	0.00
3,900.0	12.57	306.76	3,834.3	375.4	-502.5	627.2	0.00	0.00	0.00
4,000.0	12.57	306.76	3,931.9	388.4	-519.9	649.0	0.00	0.00	0.00
4,100.0	12.57	306.76	4,029.5	401.4	-537.3	670.7	0.00	0.00	0.00
4,200.0	12.57	306.76	4,127.1	414.4	-554.8	692.5	0.00	0.00	0.00
4,300.0	12.57	306.76	4,224.7	427.4	-572.2	714.2	0.00	0.00	0.00
4,400.0	12.57	306.76	4,322.3	440.5	-589.6	736.0	0.00	0.00	0.00
4,500.0	12.57	306.76	4,419.9	453.5	-607.1	757.7	0.00	0.00	0.00
4,600.0	12.57	306.76	4,517.5	466.5	-624.5	779.5	0.00	0.00	0.00
			,						
4,700.0	12.57	306.76	4,615.2	479.5	-641.9	801.3	0.00	0.00	0.00
4,800.0	12.57	306.76	4,712.8	492.5	-659.4	823.0	0.00	0.00	0.00
4,900.0	12.57	306.76	4,810.4	505.6	-676.8	844.8	0.00	0.00	0.00
4,940.6	12.57	306.76	4,850.0	510.9	-683.9	853.6	0.00	0.00	0.00
5,000.0 5,100.0	12.57	306.76	4,908.0	518.6	-694.2	866.5	0.00	0.00	0.00
5 100 ()	12.57	306.76	5,005.6	531.6	-711.7	888.3	0.00	0.00	0.00



#### PayZone Directional Services, LLC.

Planning Report



Database: EDM 2003.21 Single User Db
Company: NEWFIELD EXPLORATION
Project: USGS Myton SW (UT)
Site: SECTION 15 T9S R17E

 Well:
 V-10-9-17

 Wellbore:
 Wellbore #1

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well V-10-9-17

V-10-9-17 @ 5174.0ft (Newfield Rig) V-10-9-17 @ 5174.0ft (Newfield Rig)

True

Minimum Curvature

ned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,200.0	12.57	306.76	5,103.2	544.6	-729.1	910.0	0.00	0.00	0.00
5,300.0	12.57	306.76	5,200.8	557.7	-746.5	931.8	0.00	0.00	0.00
5,400.0	12.57	306.76	5,298.4	570.7	-763.9	953.6	0.00	0.00	0.00
5,500.0	12.57	306.76	5,396.0	583.7	-781.4	975.3	0.00	0.00	0.00
5,600.0	12.57	306.76	5,493.6	596.7	-798.8	997.1	0.00	0.00	0.00
5,700.0	12.57	306.76	5,591.2	609.7	-816.2	1,018.8	0.00	0.00	0.00
5,800.0	12.57	306.76	5,688.8	622.8	-833.7	1,040.6	0.00	0.00	0.00
5,900.0	12.57	306.76	5,786.4	635.8	-851.1	1,062.3	0.00	0.00	0.00
6,000.0	12.57	306.76	5,884.0	648.8	-868.5	1,084.1	0.00	0.00	0.00
6,062.5	12.57	306.76	5,945.0	656.9	-879.4	1,097.7	0.00	0.00	0.00

Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
V-10-9-17 TGT - plan hits target cer - Circle (radius 75.0		0.00	4,850.0	510.9	-683.9	7,186,232.71	2,063,698.90	40° 2' 17.689 N	109° 59' 17.153 W

API Well Number: 43013512660000 Project: USGS Myton SW (UT)



Site: SECTION 15 T9S R17E

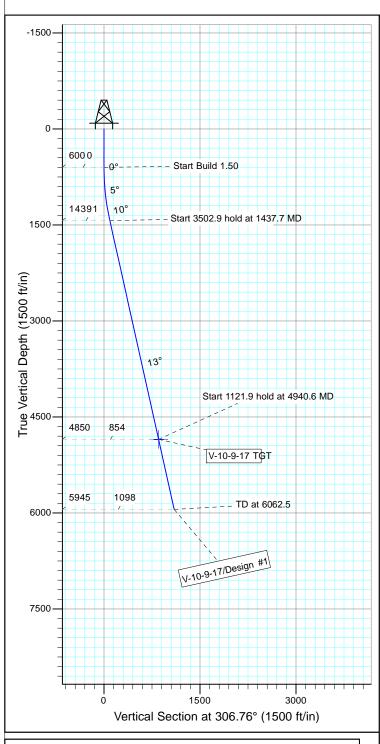
Well: V-10-9-17 Wellbore: Wellbore #1 Design: Design #1

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'



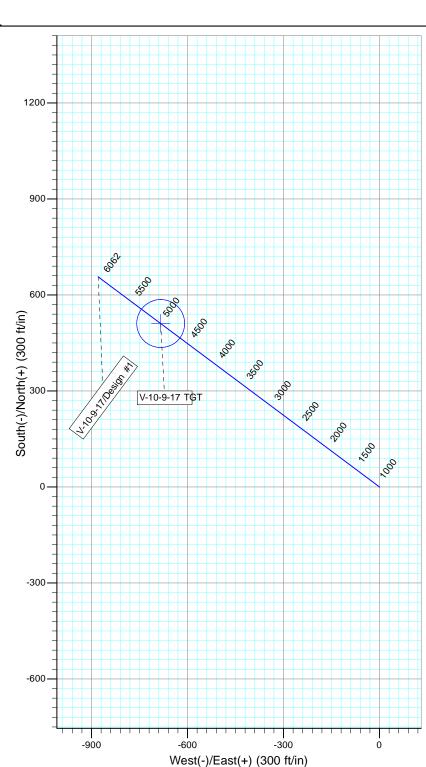
Azimuths to True North Magnetic North: 11.24°

Magnetic Field Strength: 52251.4snT Dip Angle: 65.80° Date: 2011/09/27 Model: IGRF2010









Azi +E/-W DLeg **TFace** Target 1 0.0 0.00 0.00 2 600.0 0.00 0.00 3 1437.7 12.57 306.76 0.0 600.0 1431.0 0.0 0.0 54.8 0.0 0.00 0.0 0.00 -73.3 1.50 0.0 0.0 91.5 0.00 0.00 0.00 1.50 306.76 4940.6 12.57 306.76 4850.0 510.9 -683.9 0.00 0.00 853.6 V-10-9-17 TGT 6062.5 12.57 306.76 5945.0 656.9 -879.4

SECTION DETAILS

# NEWFIELD PRODUCTION COMPANY GMBU V-10-9-17 AT SURFACE: NE/NE SECTION 15, T9S R17E DUCHESNE COUNTY, UTAH

#### ONSHORE ORDER NO. 1

#### **MULTI-POINT SURFACE USE & OPERATIONS PLAN**

#### 1. <u>EXISTING ROADS</u>

See attached Topographic Map "A"

To reach Newfield Production Company well location site GMBU V-10-9-17 located in the NE 1/4 NE 1/4 Section 15, T9S R17E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed in a southeasterly direction – 12.9 miles  $\pm$  to it's junction with an existing road to the south; proceed in a southerly direction – 1.0 miles  $\pm$  to it's junction with the beginning of the access road the existing 1-15-9-17 well location.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal. Any necessary fill material for repair will be purchase and hauled from private sources.

#### 2. PLANNED ACCESS ROAD

There is no proposed access road for this location. The proposed well will be drilled directionaly off of the existing 1-15-9-17 well pad. See attached **Topographic Map "B"**.

There will be **no** culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

#### 3. <u>LOCATION OF EXISTING WELLS</u>

Refer to Exhibit "B".

#### 4. <u>LOCATION OF EXISTING AND/OR PROPOSED FACILITIES</u>

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation.

#### 5. LOCATION AND TYPE OF WATER SUPPLY

Newfield Production will transport water by truck from nearest water source as determined by a Newfield representative for the purpose of drilling the above mentioned well. The available water sources are as follows:

Johnson Water District Water Right: 43-10136

Maurice Harvey Pond Water Right: 47-1358

Neil Moon Pond

Water Right: 43-11787

Newfield Collector Well

Water Right: 47-1817 (A30414DVA, contracted with the Duchesne County Conservancy

District).

There will be no water well drilled at this site.

#### 6. <u>SOURCE OF CONSTRUCTION MATERIALS</u>

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

#### 7. METHODS FOR HANDLING WASTE DISPOSAL

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

#### 8. <u>ANCILLARY FACILITIES</u>

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

#### 9. WELL SITE LAYOUT

See attached Location Layout Sheet.

#### **Fencing Requirements**

All pits will be fenced according to the following minimum standards:

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Existing fences to be crossed by the access road will be braced and tied off before cutting so as to prevent slacking in the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BLM specifications.

#### 10. PLANS FOR RESTORATION OF SURFACE:

#### a) Producing Location

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

#### b) Dry Hole Abandoned Location

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

#### 11. <u>SURFACE OWNERSHIP</u> – Bureau of Land Management.

#### 12. OTHER ADDITIONAL INFORMATION

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. State of Utah Antiquities Project Permit # U-03-MQ-0750b 1/12/04, prepared by Montgomery Archaeological Consultants. Paleontological Resource Survey prepared by, Wade Miller, 7/28/03. See attached report cover pages, Exhibit "D".

#### **Surface Flow Line**

Newfield requests 17' of surface flow line be granted. The Surface Flow Line will consist of up to a 14" bundled pipe consisting of 2-2" poly glycol lines and 1-3" production line. For all new wells, Newfield. **Refer to Topographic Map "C"** for the proposed location of the proposed flow line. Flow lines will be tan and will be constructed using the following procedures:

<u>Clearing and Grading</u>: No clearing or grading of the ROW will be required. The centerline of the proposed route will be staked prior to installation. Flow lines shall be placed as close to existing roads as possible without interfering with normal road travel or road maintenance activities. Due to the proximity of existing facilities, no temporary use or construction/storage areas are anticipated. If necessary, temporary use or construction/storage areas will be identified on a topographic map included in the approved permit.

<u>Installation</u>: The proposed flow lines will be installed 4-6" above the ground. For portions along existing two-track and primary access roads, lengths of pipe will be strung out in the borrow ditch, welded together, and rolled or dragged into place with heavy equipment. For pipelines that are installed cross-country (not along existing or proposed roads), travel along the lines will be infrequent and for maintenance needs only. No installation activities will be performed during periods when the soil is too wet to adequately support installation equipment. If such equipment creates ruts in excess of three (3) inches deep, the soil will be deemed too wet to adequately support the equipment.

<u>Termination and Final Reclamation:</u> After abandonment of the associated production facilities, the flow lines will be cut and removed, and any incidental surface disturbance reclaimed. Reclamation procedures will follow those outlined in the Castle Peak and Eight Mile Flat Reclamation and Weed Management Plan.

#### Water Disposal

After first production, if the production water meets quality guidelines, it will be transported to the Ashley, Monument Butte, Jonah, South Wells Draw and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project. Water not meeting quality criteria, will be disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E), Federally approved surface disposal facilities or at a State of Utah approved surface disposal facilities.

#### **Additional Surface Stipulations**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

#### **Details of the On-Site Inspection**

The proposed GMBU V-10-9-17 was on-sited on 12/8/11. The following were present; Tim Eaton (Newfield Production), Christine Cimiluca (Bureau of Land Management), Aaron Roe (Bureau of Land Management), and Suzanne Grayson (Bureau of Land Management.

#### **Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the GMBU V-10-9-17, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the GMBU V-10-9-17, Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

#### 13. <u>LESSEE'S OR OPERATOR'S REPRENSENTATIVE AND CERTIFICATION:</u>

Representative

Name: Tim Eaton

Address: Newfield Production Company

Route 3, Box 3630 Myton, UT 84052

Telephone: (435) 646-3721

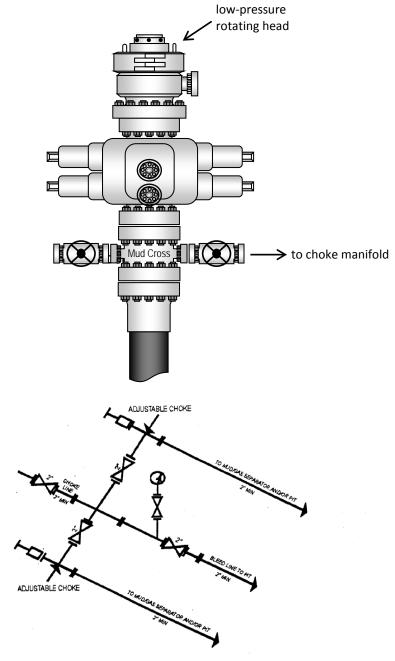
#### Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #V-10-9-17, Section 15, Township 9S, Range 17E: Lease UTU-075174 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #WYB000493.

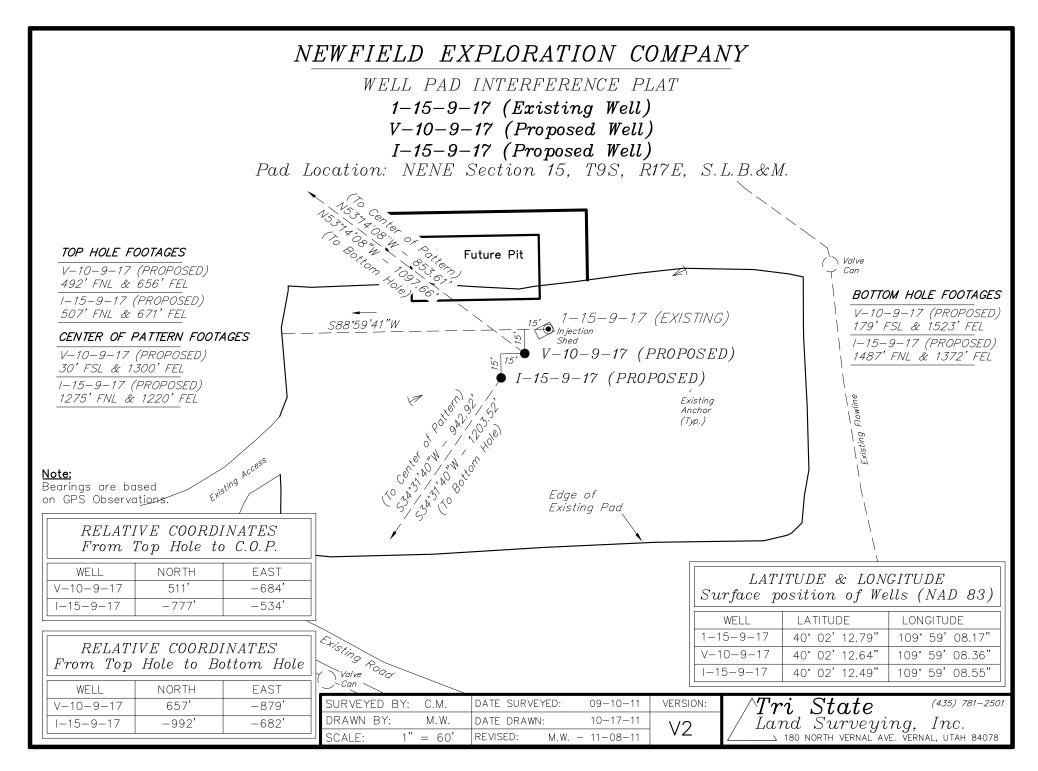
I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

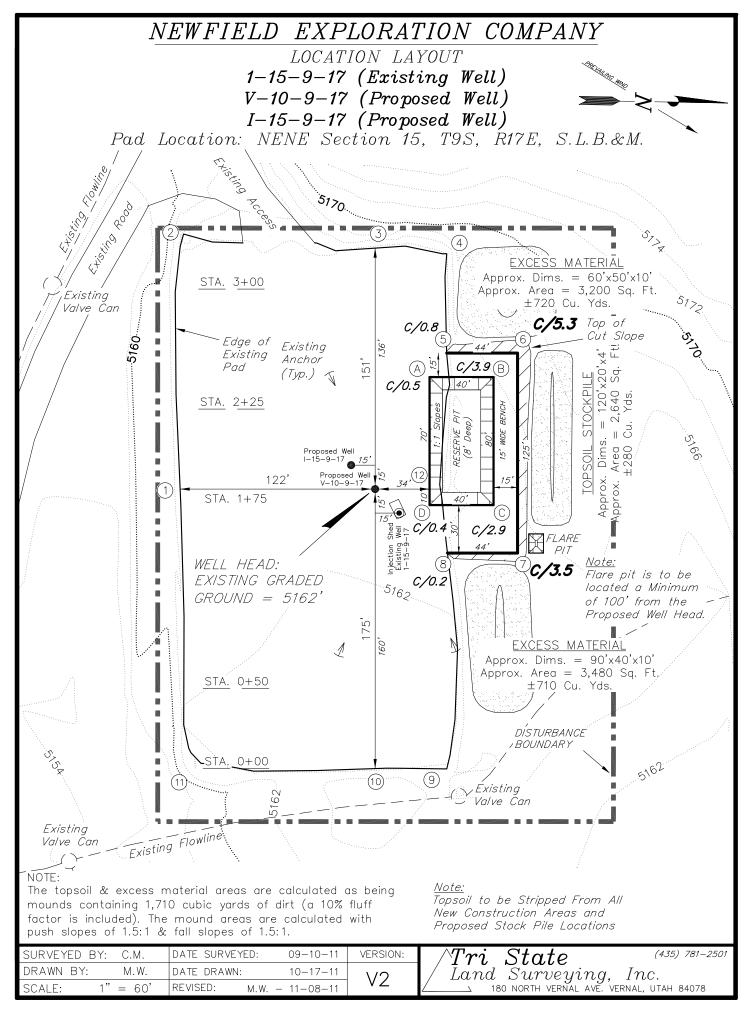
3/1/1	2
Date	Mandie Crozier
	Regulatory Analyst
	Newfield Production Company

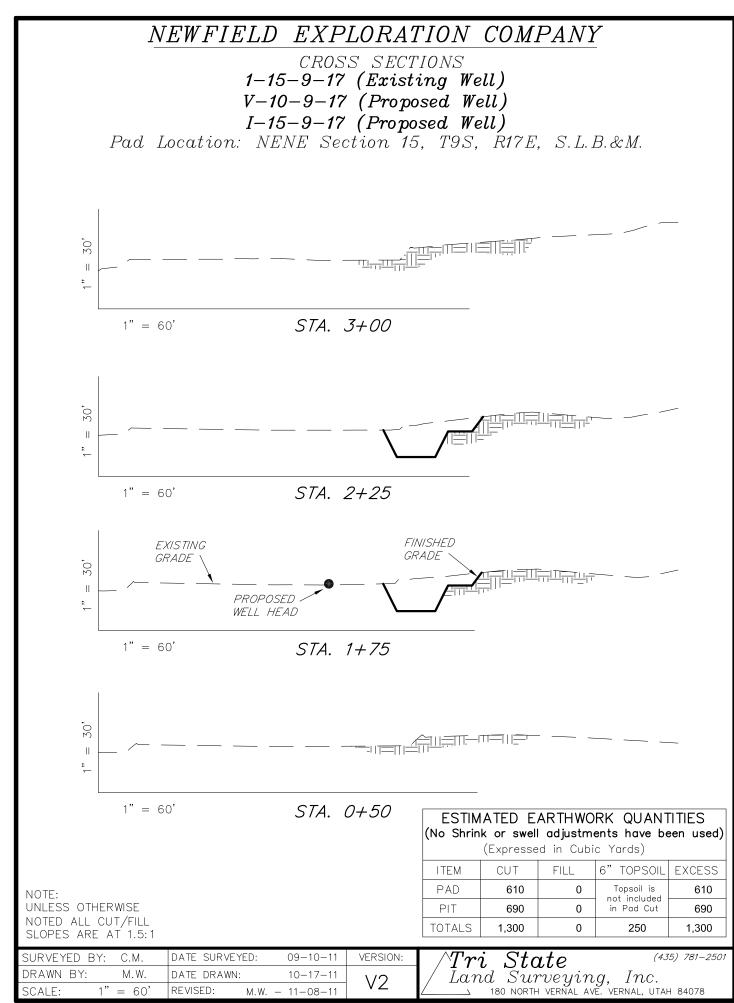
### **Typical 2M BOP stack configuration**

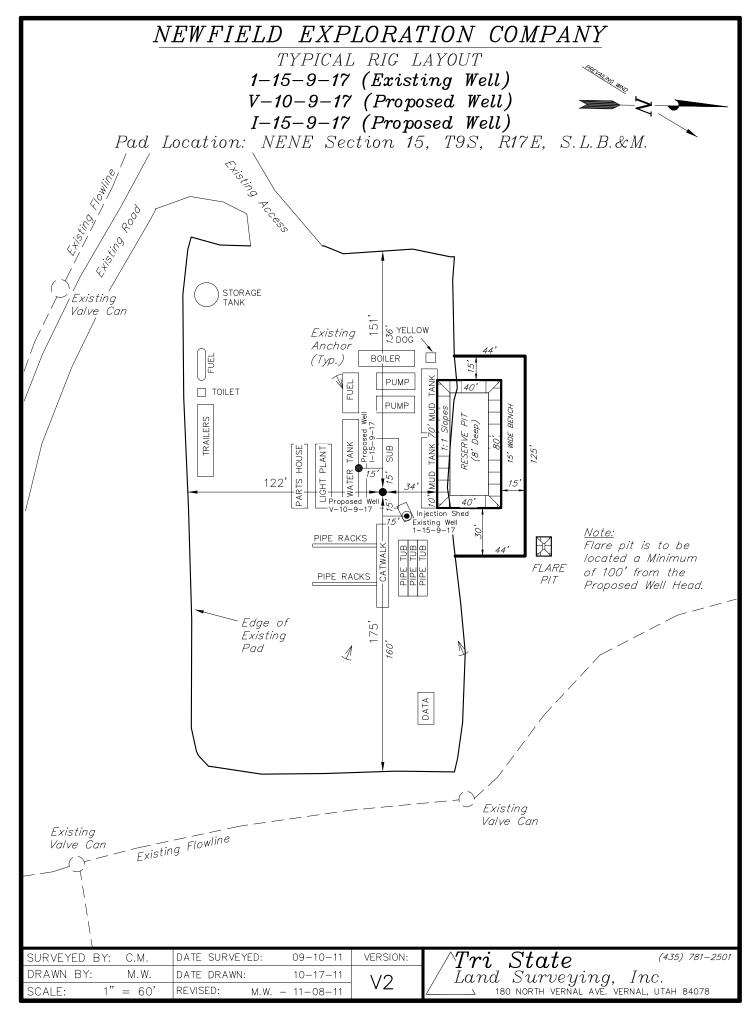


2M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY









# **United States Department of the Interior**

#### **BUREAU OF LAND MANAGEMENT**

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

March 2, 2012

#### Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2012 Plan of Development Greater Monument

Butte Unit, Duchesne and Uintah Counties,

Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2012 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

API#	WEL	WELL NAME		LO	CATION			
(Proposed PZ	GREEN	N RIVER)						
43-047-52396	GMBU	3-32-8-18H Lateral 1				R18E R18E		
43-013-51254	GMBU	3-16-9-17H Lateral 1				R17E R17E	 	 
43-013-51255	GMBU	2-16-9-16H Lateral 1				R16E R16E		
43-047-52397	GMBU	1-2-9-18H Lateral 1				R18E R18E		
43-047-52401	GMBU	1-32-8-18H Lateral 1				R18E R18E	 	 
43-013-51263	GMBU	X-10-9-17 BHL				R17E R17E		
43-013-51264	GMBU	L-10-9-17 BHL				R17E R17E	_	
43-013-51265	GMBU	W-10-9-17 BHL				R17E R17E		

RECEIVED: March 06, 2012

API#	WELL NAME			LO	CATION					
(Proposed PZ	GREEN RIVER)									
43-013-51266	GMBU V-10-9-					R17E R17E				
43-013-51267	GMBU I-15-9-					R17E R17E				
43-013-51268	GMBU S-10-9-					R17E R17E		-		
43-013-51269	GMBU U-10-9-					R17E R17E				
43-013-51270	GMBU X-11-9-					R17E R17E				
43-047-52402	GMBU F-12-9-					R17E R17E				
43-047-52403	GMBU V-2-9-1					R17E R17E				
43-047-52404	GMBU G-12-9-					R17E R17E				
43-047-52405	GMBU X-1-9-1					R17E R17E				
This office time.	This office has no objection to permitting the wells at this time.									

Michael L. Coulthard

Digitally signed by Michael L. Coulthard

DNc on-Michael L. Coulthard - Deburgue of Land Management, our-Bander of Minerals, enail-Michael, Coulthard(sollm.gov, c=US Date: 2012.03.02.1446(33-40700)

bcc: File - Greater Monument Butte Unit
 Division of Oil Gas and Mining
 Central Files
 Agr. Sec. Chron
 Fluid Chron

MCoulthard:mc:3-2-12

Page 2



#### VIA ELECTRONIC DELIVERY

March 5, 2012

State of Utah, Division of Oil, Gas and Mining ATTN: Diana Mason P.O. Box 145801 Salt Lake City, UT 84114-5801

RE: Directional Drilling

GMBU V-10-9-17

Greater Monument Butte (Green River) Unit

Surface Hole: T9S-R17E Section 15: NENE (UTU-075174)

492' FNL 656' FEL

At Target: T9S-R17E Section 10: SWSE (UTU-70821)

179' FSL 1523' FEL

Duchesne County, Utah

Dear Ms. Mason:

Pursuant to the filing by Newfield Production Company (NPC) of an Application for Permit to Drill the above referenced well dated 3/2/2012, a copy of which is attached, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole and target locations of this well are both within the boundaries of the Greater Monument Butte Unit (UTU-87538X), of which Newfield certifies that it is the operator. Further, Newfield certifies that all lands within 460 feet of the entire directional well bore are within the Greater Monument Butte Unit.

NPC is permitting this well as a directional well in order to mitigate surface disturbance by utilizing preexiting roads and pipelines.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please contact the undersigned at 303-383-4121 or by email at <a href="mailto:lburget@newfield.com">lburget@newfield.com</a>. Your consideration in this matter is greatly appreciated.

Sincerely,

Newfield Production Company

Ledie Burget

Leslie Burget Land Associate

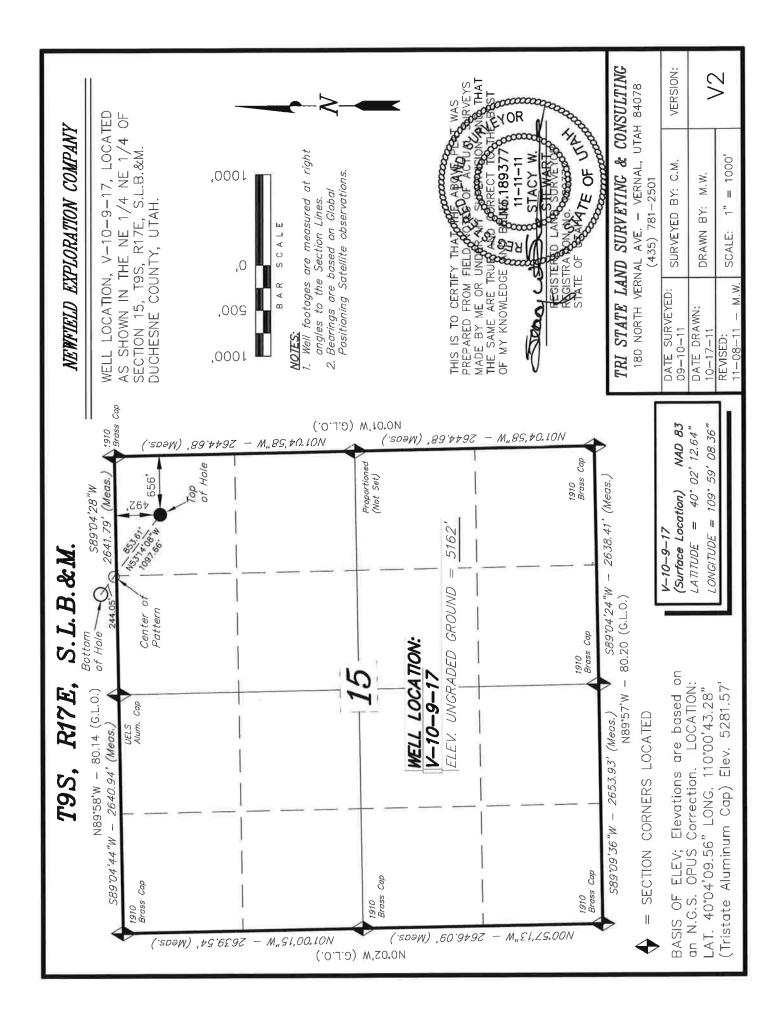
Form 3160-3 (August 2007)  UNITED ST  DEPARTMENT OF T			FORM APPR OMB No. 100 Expires July 3	)4-0136			
BUREAU OF LAND			5. Lease Scrial No. UTU075174				
APPLICATION FOR PERMIT	TO DRILL OR RE	ENTER	6. If Indian, Allottee or Tribe Name				
1a. Type of Work: ☑ DRILL ☐ REENTER			7. If Unit or CA Agreement, GREATER MONUME	Name and No. ENT			
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Oth	her Sing	le Zone	8. Lease Name and Well No. GMBU V-10-9-17				
Name of Operator Contact:     NEWFIELD PRODUCTION COMPARNAL: mcrozie	MANDIE CROZIER r@newfield.com		9. API Well No.				
3a. Address ROUTE #3 BOX 3630 MYTON, UT 84052	3b. Phone No. (includ Ph: 435-646-4825 Fx: 435-646-3031	5	10. Field and Pool, or Explor MONUMENT BUTTE	atory			
4. Location of Well (Report location clearly and in accorda	nce with any State requir	rements.*)	11. Sec., T., R., M., or Blk. a	nd Survey or Area			
At surface NENE 492FNL 656FEL			Sec 15 T9S R17E Me	er SLB			
At proposed prod. zone SWSE 179FSL 1523FEL							
14. Distance in miles and direction from nearest town or post 15.3	office*		12. County or Parish DUCHESNE	13. State UT			
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No. of Acres in Le	ease	17. Spacing Unit dedicated to	this well			
179'	720.00		20.00				
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth		20. BLM/BIA Bond No. on f	ile			
955'	6062 MD 5945 TVD		WYB000493				
21. Elevations (Show whether DF, KB, RT, GL, etc. 5162 GL	22. Approximate date 07/31/2012	work will start	23. Estimated duration 7 DAYS				
	24. Atta	achments					
The following, completed in accordance with the requirements of	f Onshore Oil and Gas O	order No. 1, shall be attached to t	his form:				
Well plat certified by a registered surveyor.     A Drilling Plan.     A Surface Use Plan (if the location is on National Forest Syst SUPO shall be filed with the appropriate Forest Service Of		Item 20 above). 5. Operator certification	ns unless covered by an existing ormation and/or plans as may b				
25. Signature (Electronic Submission)	Name (Printed/Typed) MANDIE CROZ	IER Ph: 435-646-4825		Date 03/02/2012			
Title REGULATORY ANALYST							
Approved by (Signature)	Name (Printed/Typed)			Date			
Title	Office						
Application approval does not warrant or certify the applicant he operations thereon.  Conditions of approval, if any, are attached.	olds legal or equitable titl	e to those rights in the subject le	ase which would entitle the app	licant to conduct			
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, States any false, fictitious or fraudulent statements or representate	make it a crime for any p tions as to any matter wit	erson knowingly and willfully to	make to any department or age	ency of the United			

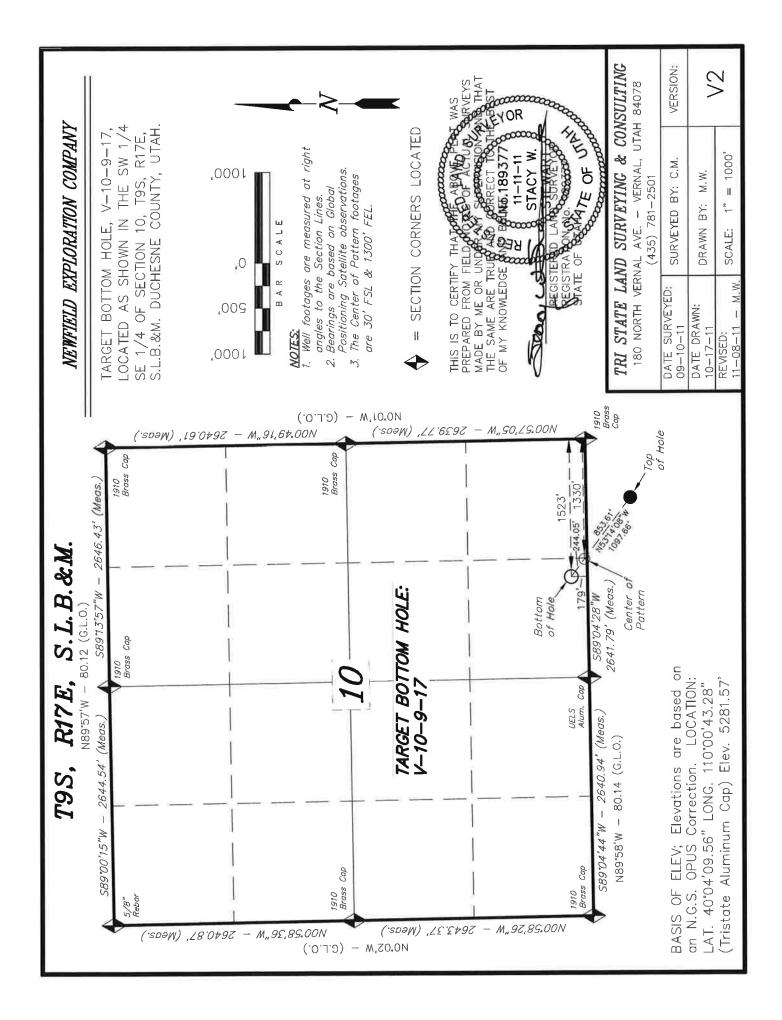
Additional Operator Remarks (see next page)

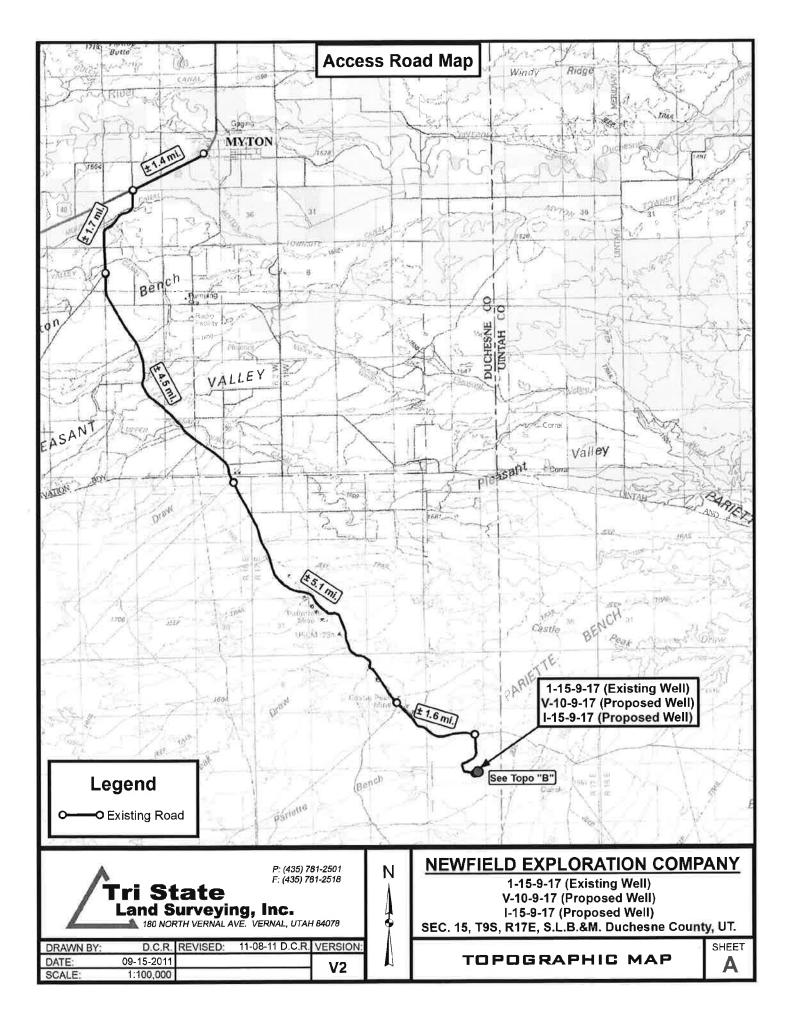
Electronic Submission #132096 verified by the BLM Well Information System For NEWFIELD PRODUCTION COMPANY, sent to the Vernal

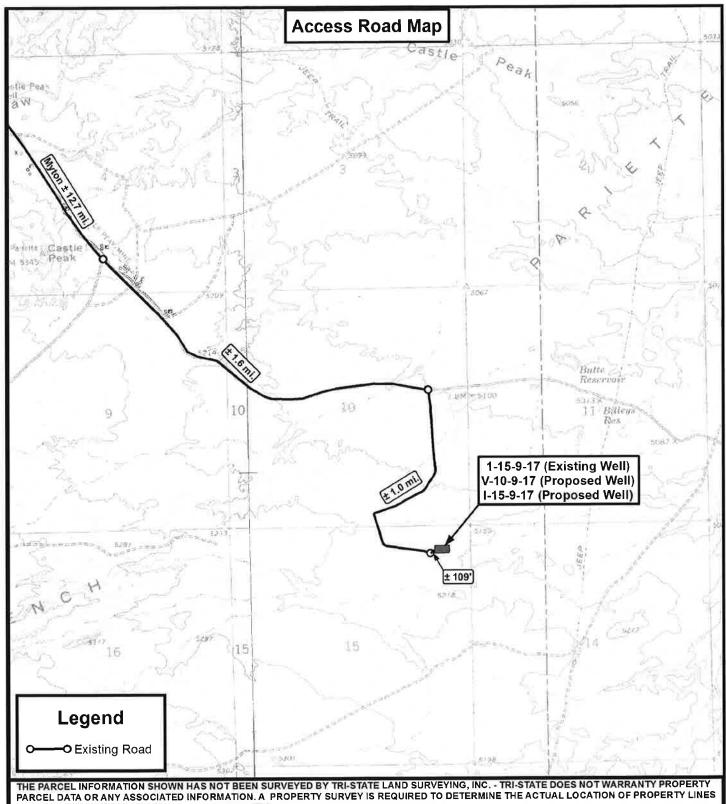
### **Additional Operator Remarks:**

SURFACE LEASE: UTU-075174 BOTTOM HOLE LEASE: UTU-70821









AND SHOW ACCURATE DISTANCES ACROSS PARCELS.



DRAWN BY:	D.C.R.	REVISED:	11-08-11 D.C.R.	VERSION:
DATE:	09-15-2011			V2
SCALE:	1 " = 2,000 '			٧Z



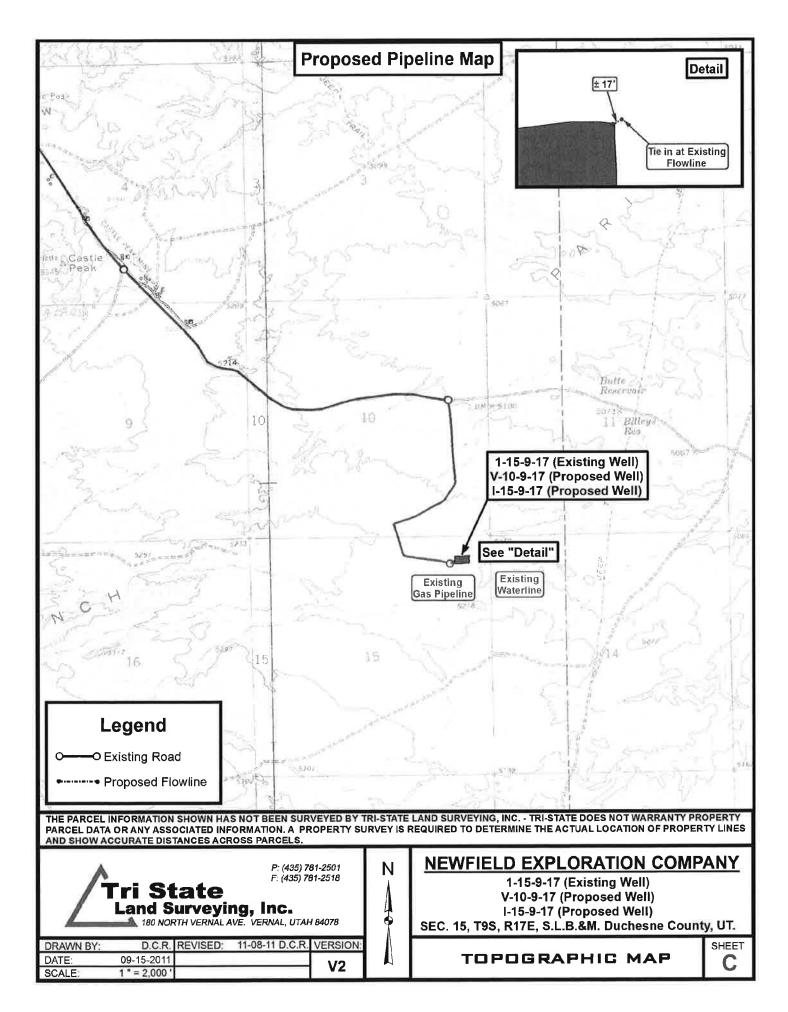
## NEWFIELD EXPLORATION COMPANY

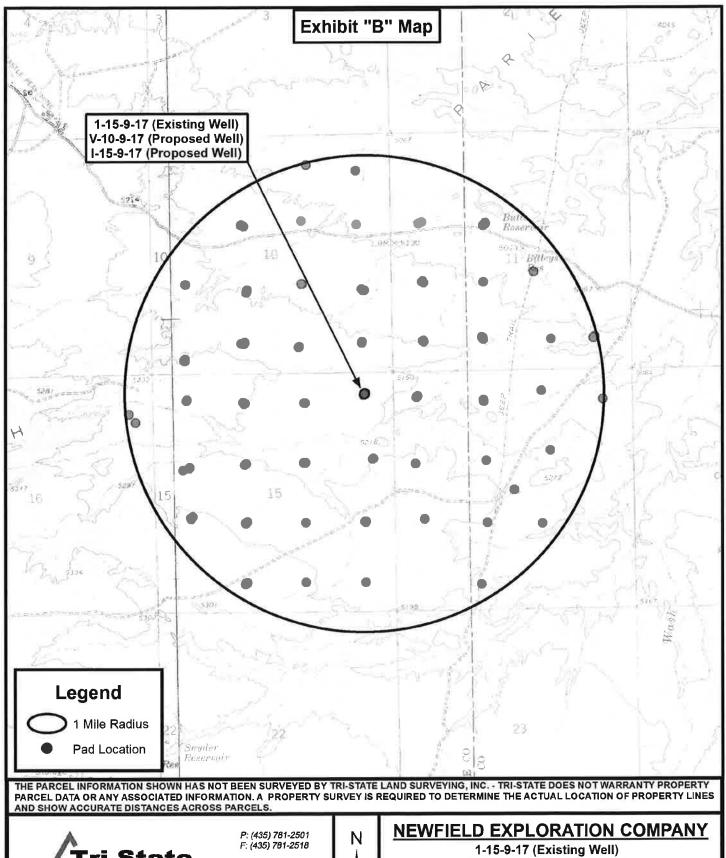
1-15-9-17 (Existing Well) V-10-9-17 (Proposed Well) I-15-9-17 (Proposed Well)

SEC. 15, T9S, R17E, S.L.B.&M. Duchesne County, UT.

TOPOGRAPHIC MAP

SHEET B







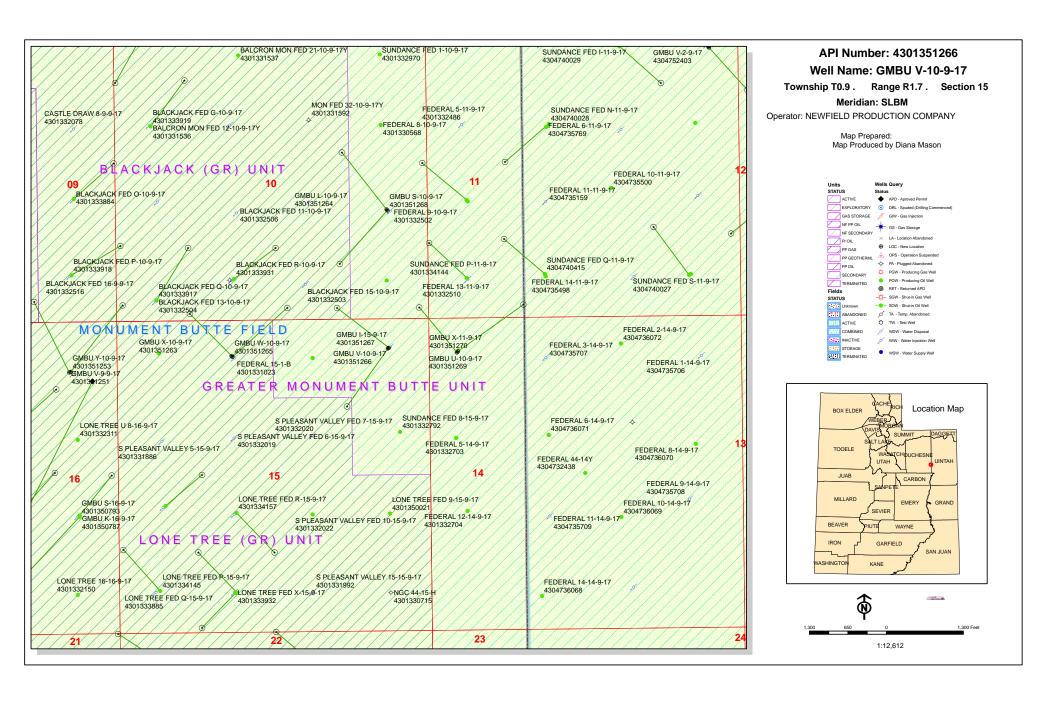
DRAWN BY:	D.C.R.	REVISED:	11-08-11 D.C.R.	VERSION:
DATE:	09-15-2011			V2
SCALE:	1"=2.000'			V 2



V-10-9-17 (Proposed Well) I-15-9-17 (Proposed Well) SEC. 15, T9S, R17E, S.L.B.&M. Duchesne County, UT.

TOPOGRAPHIC MAP

SHEET



API Well Number: 43013512660000

# WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 3/1/2012 **API NO. ASSIGNED:** 43013512660000

WELL NAME: GMBU V-10-9-17

OPERATOR: NEWFIELD PRODUCTION COMPANY (N2695) PHONE NUMBER: 435 646-4825

**CONTACT:** Mandie Crozier

PROPOSED LOCATION: NENE 15 090S 170E Permit Tech Review:

SURFACE: 0492 FNL 0656 FEL Engineering Review:

BOTTOM: 0179 FSL 1523 FEL Geology Review: 

✓

COUNTY: DUCHESNE

LATITUDE: 40.03683 LONGITUDE: -109.98571

**UTM SURF EASTINGS:** 586534.00 **NORTHINGS:** 4432337.00

FIELD NAME: MONUMENT BUTTE

LEASE TYPE: 1 - Federal

**LEASE NUMBER:** UTU-075174 **PROPOSED PRODUCING FORMATION(S):** GREEN RIVER

SURFACE OWNER: 1 - Federal COALBED METHANE: NO

**RECEIVED AND/OR REVIEWED: LOCATION AND SITING:** ✓ PLAT R649-2-3. Unit: GMBU (GRRV) Bond: FEDERAL - WYB000493 **Potash** R649-3-2. General Oil Shale 190-5 Oil Shale 190-3 R649-3-3. Exception **Drilling Unit** Oil Shale 190-13 Board Cause No: Cause 213-11 Water Permit: 437478 Effective Date: 11/30/2009 **RDCC Review:** 

Fee Surface Agreement Siting: Suspends General Siting

Intent to Commingle 

✓ R649-3-11. Directional Drill

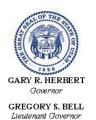
Commingling Approved

Comments: Presite Completed

Stipulations: 4 - Federal Approval - dmason

15 - Directional - dmason

27 - Other - bhill



## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

## Permit To Drill

\*\*\*\*\*\*

**Well Name:** GMBU V-10-9-17 **API Well Number:** 43013512660000

Lease Number: UTU-075174 Surface Owner: FEDERAL Approval Date: 3/15/2012

#### Issued to:

NEWFIELD PRODUCTION COMPANY, Rt 3 Box 3630, Myton, UT 84052

#### Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 213-11. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

### **Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Production casing cement shall be brought up to or above the top of the unitized interval for the Greater Monument Butte Unit (Cause No. 213-11).

#### **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available) OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at http://oilgas.ogm.utah.gov

#### Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
  - Requests to Change Plans (Form 9) due prior to implementation
  - Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
  - Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers Associate Director, Oil & Gas Form 3160-3 (August 2007)

## UNITED STATES

DEPARTMENT OF THE INTERIOR

ADDITION FOR DEDMIT TO DOLL OF DEELTED

FORM APPROVED
OMB No. 1004-013
Expires July 31, 201

6 If Indian Allottee or Tribe Name

BUREAU OF LAND MANAGEMENT MAR 0 6 2012 Lease Serial No. UTU075174

AFFEIGATION FOR FERINIT	PI M	o. It makin, throttoe of the	o i vanio				
Ia. Type of Work: ☑ DRILL ☐ REENTER	Service Countries of Fr C	7. If Unit or CA Agreement, GREATER MONUMI					
1b. Type of Well:		8. Lease Name and Well No GMBU V-10-9-17					
Name of Operator Contact:     NEWFIELD PRODUCTION COMPANNail: mcrozie	9 API Well No. 43-013-51200 10. Field and Pool, or Explo	$\mathcal{Q}$					
3a. Address ROUTE #3 BOX 3630 MYTON, UT 84052							
4. Location of Well (Report location clearly and in accorded	ance with any State requirements.*)	11. Sec., T., R., M., or Blk.	and Survey or Area				
At surface NENE 492FNL 656FEL		Sec 15 T9S R17E M	er SLB				
At proposed prod. zone SWSE 179FSL 1523FEL	Sec. 10.						
<ol> <li>Distance in miles and direction from nearest town or post 15.3</li> </ol>	office*	12. County or Parish DUCHESNE	13. State UT				
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No. of Acres in Lease	17. Spacing Unit dedicated t	o this well				
179'	720.00	20.00	•				
<ol> <li>Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.</li> </ol>	19. Proposed Depth	20. BLM/BIA Bond No. on file					
955'	6062 MD 5945 TVD	WYB000493					
21. Elevations (Show whether DF, KB, RT, GL, etc. 5162 GL	22. Approximate date work will start 07/31/2012	23. Estimated duration 7 DAYS					
	24. Attachments						
The following, completed in accordance with the requirements of	f Onshore Oil and Gas Order No. 1, shall be attached to	his form:					
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Systems SUPO shall be filed with the appropriate Forest Service Off</li> </ol>	Em Lands, the Such other site specific infauthorized officer.	ns unless covered by an existing	· ·				
25. Signature (Electronic Submission)							
Title REGULATORY ANALYST							
Approved by (Signature)	Name (Printed/Typed) Jerry Kenczka		AUG 2 0 2012				
Assistant Field Manager Lands & Mineral Resources	VERNAL FIELD OFFICE						
Application approval does not warrant or certify the applicant ho operations thereon.  Conditions of approval, if any, are attached.	Ids legal or equitable title to those rights in the subject le NS OF APPROVAL ATTACHED	ase which would entitle the app	licant to conduct				
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, r States any false, fictitious or fraudulent statements or representati	nake it a crime for any person knowingly and willfully to ons as to any matter within its jurisdiction.	· · · · · · · · · · · · · · · · · · ·	*				
			RECEIVED				

Additional Operator Remarks (see next page)

AUG 2 2 2012

Electronic Submission #132096 verified by the BLM Well Information System For NEWFIELD PRODUCTION COMPANY, sent to the Vernal Committed to AFMSS for processing by LESLIE ROBINSON on 03/09/2012 ()

DIV. OF OIL, GAS & MINING

NOTICE OF APPROVAL

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

12(VSM)2AG

11×12/19/11



## UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE**

**VERNAL. UT 84078** 

(435) 781-4400



### CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No: API No:

**Newfield Production Company** 

170 South 500 East

GMBU V-10-9-17

43-013-51266

Location: Lease No:

Agreement:

NENE, Sec. 15, T9S, R17E

UTU-075174

**Greater Monument Butte** 

OFFICE NUMBER:

(435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

### A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

#### **NOTIFICATION REQUIREMENTS**

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)		Twenty-Four (24) hours prior to running casing and cementing all casing strings to:  blm_ut_vn_opreport@blm.gov
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 9 Well: GMBU V-10-9-17 8/17/2012

## SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 designrated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop
  work and contact the Authorized Officer (AO). A determination will be made by the AO as to what
  mitigation may be necessary for the discovered paleontologic material before construction can
  continue.

#### Wildlife

In accordance with the Record of Decision for the Castle Peak and Eightmile Flat Oil and Gas Expansion Project, Newfield Rocky Mountains Inc., the following COA's are required:

- WFM-1 On level or gently sloping ground (5 percent slope or less) Newfield will elevate surface pipelines (4 inches or greater in diameter) a minimum of 6 inches above the ground to allow passage of small animals beneath the pipe. This ground clearance will be achieved by placing the pipeline on blocks at intervals of 150 to 200 feet.
- WFM-4 Newfield will install noise reduction devices on all pump jacks to reduce intermittent noise to 45 dBA at 660 feet from the source.

#### COA's derived from mitigating measures in the EA:

• Newfield will contract a qualified biologist to conduct a breeding bird survey within 330 feet (100 meters) from proposed surface disturbance activities associated with wellfield development (e.g. well pads, roads, pipelines, power lines, and ancillary facilities) that would occur during the breeding season from April 1 through July 31. If an active nest for important migratory bird species (USFWS Bird of Conservation Concern, Partners in Flight Priority Bird Species, Utah Sensitive Species) is documented during the survey, Newfield will coordinate with to determine if any additional protection measures will be required. Alternatively, prior to surface disturbance activities within that year, Newfield will clear vegetation within the year of surface disturbance activities outside of the breeding season (April 1 through July 31).

#### For protection of T&E Fish if drawing water from the Green River

 For areas of fresh water collection, an infiltration gallery will be constructed in a Service approved location. An infiltration gallery is basically a pit or trench dug within the floodplain to a depth below the water table. Water is drawn from the pit rather than from the river directly. If this is not possible, limit pumping within the river to off-channel locations that do not connect to the river during high spring flows.

Page 3 of 9 Well: GMBU V-10-9-17 8/17/2012

- If water cannot be drawn using the measures above and the pump head will be located in the river channel where larval fish are known to occur, the following measures apply:
  - Avoid pumping from low-flow or no-flow areas as these habitats tend to concentrate larval fished
  - Avoid pumping to the greatest extent possible, during that period of the year when larval fish may be present (see previous bullet); and
  - Avoid pumping, to the greatest extent possible, during the midnight hours (10:00 p.m. to 2:00 a.m.) as larval drift studies indicate that this is a period of greatest daily activity. Dusk is the preferred pumping time, as larval drift abundance is lowest during this time.
  - o Screen all pump intakes with 3/32-inch mesh material.

0

Report any fish impinged on the intake screen to the FWS office (801.975.3330) and the:

Utah Division of Wildlife Resources Northeastern Region 152 East 100 North Vernal, UT 84078 (435) 781-9453

#### **Air Quality**

- 1. All internal combustion equipment will be kept in good working order.
- 2. Water or other approved dust suppressants will be used at construction sites and along roads, as determined appropriate by the Authorized Officer. Dust suppressant such as magnesium chloride or fresh water may be used, as needed, during the drilling phase.
- 3. Open burning of garbage or refuse will not occur at well sites or other facilities.
- 4. Drill rigs will be equipped with Tier II or better diesel engines.
- 5. Low bleed pneumatics will be installed on separator dump valves and other controllers.
- 6. During completion, not venting will occur, and flaring will be limited as much as possible. Production equipment and gathering lines will be installed as soon as possible.
- 7. Telemetry will be installed to remotely monitor and control production.
- 8. Signs will be installed on the access road, reducing speed to 25 MPH, during the drilling phase.
- 9. When feasible, two or more rigs (including drilling and completion rigs) will not be run simultaneously within 200 meters of each other. If two or more rigs must be run simultaneously within 200 meters of each other, then effective public health buffer zones out to 200 meters (m) from the nearest emission source will be implemented. Examples of an effective public health protection buffer zone include the demarcation of a public access exclusion zone by signage at intervals of every 250 feet that is visible from a distance of 125 feet during daylight hours, and a physical buffer such as active surveillance to ensure the property is not accessible by the public during drilling operations. Alternatively, the proponent may demonstrate compliance with the 1-hour NO<sub>2</sub> National Ambient Air Quality Standards (NAAQS) with appropriate and accepted near-field modeling. As part of this demonstration, the proponent may propose alternative mitigation that could include but is not limited to natural gas—fired drill rigs, installation of NO<sub>X</sub> controls, time/use restrictions, and/or drill rig spacing.
- 10. All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horse power must not emit more than 2 grams of NO<sub>X</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower-hour.
- 11. All new and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 grams of NO<sub>X</sub> per horsepower-hour.
- 12. Green completions will be used for all well completion activities where technically feasible.

Page 4 of 9 Well: GMBU V-10-9-17 8/17/2012

13. Employ enhanced VOC emission controls with 95% control efficiency on production equipment having a potential to emit greater than 5 tons per year.

#### S.O.P.s

- After cessation of drilling and completion operations, any visible or measurable layer of oil must be removed from the surface of the reserve pit and the pit kept free of oil.
- Pits must be free of oil and other liquid and solid wastes prior to filling. Pit liners must not be breached (cut) or filled (squeezed) while still containing fluids. The pit liner must be removed to the solids level or treated to prevent its reemergence to the surface or its interference with long-term successful revegetation.
- All operator employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's, ROW, COAs permits/authorizations on their person(s) during all phases of construction.

Page 5 of 9 Well: GMBU V-10-9-17 8/17/2012

#### Reclamation

Reclamation will be completed in accordance with the Newfield Exploration Company Castle Peak
and Eight Mile Flat Reclamation Plan on file with the Vernal Field Office of the BLM and the Green
River District Reclamation Guidelines (2011). Reclamation success will be determined in
accordance with the 2011 Guidelines.

#### **Monitoring and Reporting**

- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) that designates the proposed site-specific monitoring and reference sites chosen for the location. A description of the proposed sites shall be included, as well as a map showing the locations of the proposed sites.
- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) 3 growing seasons after reclamation efforts have occurred evaluating the status of the reclaimed areas in order to determine whether the BLM standards set forth in the Green River District Reclamation Guidelines have been met (30% or greater basal cover).
- Prior to beginning new surface disturbance, the operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) providing the results of the noxious weed inventory described in the *Green River District Reclamation Guidelines* (2011). If weeds are found the report shall include 1) A GPS location recorded in North American Datum 1983; 2) species; 3) canopy cover or number of plants; 4) and size of infestation (estimate square feet or acres. Information shall be also documented in the reclamation report.

Page 6 of 9 Well: GMBU V-10-9-17 8/17/2012

## DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### SITE SPECIFIC DOWNHOLE COAs:

 Newfield Production Co. shall adhere to all referenced requirements in the SOP (Version: "Greater Monument Butte Green River Development Program", Feb 16, 2012). The operator shall also comply with applicable laws and regulations; with lease terms Onshore Oil and Gas Orders, NTL's; and with other orders and instructions of the, Authorized Officer

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

#### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily
  drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order
  No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a
  test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's
  log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is
  encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal
  Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each

Page 7 of 9 Well: GMBU V-10-9-17 8/17/2012

encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
   Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall
  be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL
  to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to BLM\_UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 8 of 9 Well: GMBU V-10-9-17 8/17/2012

#### **OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at <a href="https://www.onra.gov">www.onra.gov</a>.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
  notified when it is placed in a producing status. Such notification will be by written communication
  and must be received in this office by not later than the fifth business day following the date on
  which the well is placed on production. The notification shall provide, as a minimum, the following
  informational items:
  - o Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - o The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid,

Page 9 of 9 Well: GMBU V-10-9-17 8/17/2012

and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office
  Petroleum Engineers will be provided with a date and time for the initial meter calibration and all
  future meter proving schedules. A copy of the meter calibration reports shall be submitted to the
  BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid
  hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall
  be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to
  the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first.
  All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All
  product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in
  accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering
  lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a
  suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be
  obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior approval
  of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
  approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
  of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

## BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# Ross 29 Submitted By Branden Arnold Phone Number 435-401-0223 Well Name/Number GMBU V-10-9-17 Qtr/Qtr NE/NE Section 15 Township 9S Range 17E Lease Serial Number UTU-075174 API Number 43-013-51266 Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string. Date/Time 8/27/12 8:00 AM  $\bowtie$  PM  $\bowtie$ Casing – Please report time casing run starts, not cementing times. Surface Casing **Intermediate Casing Production Casing** Liner Other Date/Time <u>8/27/12</u> <u>3:00</u> AM ☐ PM ⊠ **BOPE** Initial BOPE test at surface casing point BOPE test at intermediate casing point 30 day BOPE test Other Date/Time \_\_\_\_\_ AM PM D Remarks

FORM 3160-5 (August 2007)

Subsequent Report

Final Abandonment

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: July 31,2010

X Other

Spud Notice

SUNDRY NOTICES AND REPORTS ON WELLS

Casing Repair

Change Plans

Convert to Injector

Lease Serial No.

Do not use	USA UTU-075174				
abandoned w	rell. Use Form 3160-3	6. If Indian, Allottee or Tribe Name.			
SUBMIT IN	TRIPLICATE - Otl	7. If Unit or CA/Agreement, Name and/or GMBU			
1. Type of Well Oil Well Gas Well 2. Name of Operator	Other		8. Well Name and No. GMBU V-10-9-17		
NEWFIELD PRODUCTION C 3a. Address Route 3 Box 3630	OMPANY	9. API Well No. 4301351266			
Myton, UT 84052  4. Location of Well (Footage,	Sec., T., R., M., or Survey E 2 FNL 656 FE	435.646.3721 Description)	10. Field and Pool, or Exploratory Area GREATER MB UNIT 11. County or Parish, State		
Section 15T9S R17E			DUCHESNE, UT		
12. CHEC	K APPROPRIATE BO	X(ES) TO INIDICATE NATURE O	F NOTICE, OR OTHER DATA		
TYPE OF SUBMISSION		ION			
☐ Notice of Intent	Acidize Alter Casing	uction (Start/Resume) Water Shut-Off amation Well Integrity			

13. Describe Proposed or Completed Operation: (Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final

☐ Plug Back

■ New Construction

Plug & Abandon

Recomplete

Temporarily Abandon

Water Disposal

On 8/28/12 MIRU Ross #29. Spud well @8:00 AM. Drill 330' of 12 1/4" hole with air mist. TIH W/ 7 Jt's 8 5/8" J-55 24# csgn. Set @ 324.22. On 8/30/12 cement with 160 sks of class "G" w/ 2% CaCL2 + 0.25#/sk Cello- Flake Mixed @ 15.8ppg w/ 1.17ft3/sk yield. Returned 7 barrels cement to pit. WOC.

I hereby certify that the foregoing is true and correct (Printed/ Typed)	Title				
Branden Arnold Signature	Date 08/30/2012				
THIS SPACE FOR FEL	DERAL OR STATE OFFI	CE USE			
Approved by	Title	Date			
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	•			

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on page 2)

RECEIVED

# Casing / Liner Detail

Well											
Prospect	Monument	Butte	agrangengen versker met option for de state option state option state option state option state option state o								
Foreman											
Run Date:											
7147 4107											
String Type	Surface, 8.0	625", 24#, 、	J-55, STC (G	Generic)							
			- Det	ail From Top To Bottom -							
Depth	Length	OD	ID								
<u> </u>	I	<u> </u>									
324.22			10' BK								
10.00	1.42		Wellhead								
11.42	265.90	6	8 5/8 Casing	8.625							
277.32	46.00	1	Shoe Joint	8.625							
323.32	0.90		Guide Shoe	8.625							
324.22			-								
1				Cement Detail		and an employed where the second					
Cement Comp	en un acceptable de la company	Many 12 manager, 15 party 15	1	The solution of the same of th							
	f Sacks Weigh 160 15	ગt(ppg)¦ Yiek 5.8 1.17		Description - Slurry Class and Additive Class G+2%kcl+.25#CF	s						
Oldiny 1	100	7.0 1.17	107.2	Glada G. E. Mich. Land.							
Stab-In-Job?		No		Cement To Surface?							
BHT:		0		Est. Top of Cement:	0						
Initial Circulation	n Pressure:	The second control of									
Initial Circulation		47	5								
Final Circulation											
Final Circulation	eras contrata de como de la como como como como como como como com										
Displacement F											
Displacement R	and a construction of the contraction of the contra										
Displacement V		17		CIP:	9:3						
Mud Returns:											
	e And Placemer	nt:		Casing Weight Set On Slips:							



Middle of first, top of second and third for a total of three.

# STATE OF UTAH DIVISION OF OIL, GAS AND MINING ENTITY ACTION FORM -FORM 6

OPERATOR: NEWFIELD PRODUCTION COMPANY
ADDRESS: RT. 3 BOX 3630

MYTON, UT 84052

OPERATOR ACCT. NO. N2695

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO,	API NUMBER	WELL NAME	Ca		LL LOCAT		COUNTY	SPUD DATE	EFFECTIVE
В	99999	17400	<b>- 4301351267</b>	GMBU I-15-9-17	NENE	15	95	17E	DUCHESNE	8/29/2012	9/21/12
WELL 1 COMMENTS: GRRY BHL:SWN											
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	QQ	-	LL LOCAT			SPUD DATE	EFFECTIVE
В	99999	17400	4301351266	GMBU V-10-9-17	NENE	15	98	17E	DUCHESNE	8/28/2012	9/21/12
(J)	GRRY BHZ: SIO SWSR										
ACTION	CURRENT	NEW	API NUMBER	WELL NAME			LL LOCAT			SPUD	EFFECTIVE
В	ENTITY NO.	ENTITY NO.			00	SC	TP	RG	COUNTY	DATE	
A	99999	18709	4301351033	UTE TRIBAL 6-7-3-2W	SENW	7	38	2W	DUCHESNE	8/24/2012	9/21/12
$-\omega$	STC									Concin	derica de la companya
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME		SC WE	LL LOCAT	ION RG	COUNTY	DATE	DATE
В	99999	17400	4301351263	GMBU X-10-9-17	NENW	15	98	17E	DUCHESNE	8/15/2012	9/21/12
G1	erv Br	tL: Su	usw								
ACTION	CURRENT	NEW	API NUMBER	WELL NAME			LLLOCAT			SPUD	EFFECTIVE
CODE	ENTITY NO.	ENTITY NO.			QQ	SC	TP	RG	COUNTY	DATE	DATE
A	99999	18710	4304752022	UTE TRIBAL 9-9-4-1E	NESE	9	45	1E	UINTAH	7/19/2012	9/21/12
WELL 1 C	DMMENTS:										
ACTION	CURRENT	NEW	API NUMBER	WELL NAME			LL LOCAT			SPUD	EFFECTIVE
CODE	ENTITY NO.	ENTITY NO.			QQ	sc	TP	RG	COUNTY	DATE	DATE
В	99999	17400	4301351107	GMBU B-13-9-15	SWSE	12	98	15E	DUCHESNE	8/31/2012	912/112
G	RRV B	HL SI	3 nene								
ACTION	CURRENT	NEW	API NUMBER	WELL NAME		WE	LLOCAT	QM-1\/	COUNTY	SPUD	EFFECTIVE
В	ENTITY NO.	ENTITY NO.			00	SC	n ŒV	r LRG∀	b= E= ∕ COUNTY	DATE	1

Sundry Number: 31518 API Well Number: 43013512660000

	STATE OF UTAH			FORM 9			
ι	DEPARTMENT OF NATURAL RESOURG DIVISION OF OIL, GAS, AND MII			5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-075174			
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:						
	pposals to drill new wells, significantly reenter plugged wells, or to drill horizon for such proposals.			7.UNIT or CA AGREEMENT NAME: GMBU (GRRV)			
1. TYPE OF WELL Oil Well				8. WELL NAME and NUMBER: GMBU V-10-9-17			
2. NAME OF OPERATOR: NEWFIELD PRODUCTION CO	DMPANY			<b>9. API NUMBER:</b> 43013512660000			
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT,	, 84052 435 646-482		NE NUMBER:	9. FIELD and POOL or WILDCAT: MONUMENT BUTTE			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0492 FNL 0656 FEL				COUNTY: DUCHESNE			
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 5 Township: 09.0S Range: 17.0E Merio	idian: S	S	STATE: UTAH			
11. CHEC	K APPROPRIATE BOXES TO INDICA	ATE NA	ATURE OF NOTICE, REPOR	RT, OR OTHER DATA			
TYPE OF SUBMISSION			TYPE OF ACTION				
	ACIDIZE	Па	LTER CASING	CASING REPAIR			
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	С	HANGE TUBING	CHANGE WELL NAME			
	CHANGE WELL STATUS	☐ c	OMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE			
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	☐ FF	RACTURE TREAT	☐ NEW CONSTRUCTION			
	OPERATOR CHANGE	☐ PI	LUG AND ABANDON	PLUG BACK			
SPUD REPORT	✓ PRODUCTION START OR RESUME		ECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION			
Date of Spud:			IDETRACK TO REPAIR WELL	TEMPORARY ABANDON			
✓ DRILLING REPORT	L TUBING REPAIR		ENT OR FLARE	☐ WATER DISPOSAL			
Report Date: 10/2/2012	☐ WATER SHUTOFF	∟ sı	I TA STATUS EXTENSION	APD EXTENSION			
	WILDCAT WELL DETERMINATION	∐ o	THER	OTHER:			
The above well w	completed operations. Clearly show as placed on production or hours.	n 10/	'02/2012 at 13:00	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY November 02, 2012			
NAME (PLEASE PRINT) Jennifer Peatross	<b>PHONE NUME</b> 435 646-4885	BER	TITLE Production Technician				
SIGNATURE N/A			<b>DATE</b> 11/2/2012				

\*(See instructions and spaces for additional data on page 2)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: July 31, 2010

#### WELL COMPLETION OR RECOMPLETION REPORT AND LOG

												5. Lease Serial No. UTU-075174				
la. Type of V	Well	✓Oil	Well	Ga	s Well	Dry D	Other				*****				Allottee or 7	Tribe Name
b. Type of Completion: New Well Work Over Deepen Plug Back Diff. Resvr.,																
Other:												GMI	7. Unit or CA Agreement Name and No. GMBU (GRRV)			
2. Name of Operator NEWFIELD EXPLORATION COMPANY															me and Well 0-9-17	No.
3. Address	1401 17TH S	T. SUITE	1000 DE	NVER, CO	80202			3a. Phone 1 (435) 646	No. <i>(incl</i> i-3721	"RE	CEI	VED		FI Well 13-512		
4. Location	of Well (Re	port loca	ution cle	arly and	in accord	dance with Feder	al requir	ements)*							d Pool or Ex	
At surface	<sup>≅</sup> 492' FNL	_ & 656	'FEL (	NE/NE)	SEC. 1	5, T9S, R17E (	(UTU-07	75174)		リヒし	1 3	2012	11. 5	Sec., T.,	R., M., on B	
			,	·			•	,	DIV.	OFO	L.GAS	& MINING	S	Survey o	r Area SEC.	15, T9S, R17E
At top pro		_				I' FEL (NE/NE)			Έ (UTI	U-075	174)			County	or Parish	13. State
At total de		SL & 1				C. 10, T9S, R1						Μ	DUC	CHESN	IE	UT
14. Date Sp 08/28/201			15. 09	Date T.I 0/09/201	). Reache 2	ed	1	16. Date Comp D & A		10/02/2 Ready t			17. J 516:	Elevatio 2' Gl	ns (DF, RK) 5172' KB	B, RT, GL)*
18. Total De		5995' 5883'			19. Pl	ug Back T.D.:	MD 59					idge Plug S	Set:	MD TVD		
21. Type El	ectric & Oth	er Mecha	nical Lo			py of each)				ι		cored?	ΖN	。	Yes (Submi	• ,
		<u> </u>				EUTRON,GR,	CALIPE	ER, CMT BO	ND	1 '	Vas DST Direction	run? al Survey?	N 🔼		Yes (Submit Yes (Submit	
23. Casing Hole Size	and Liner R		<i>leport a</i> /t. (#/ft.)		set in we	Bottom (MD	Sta	age Cementer	No.	of Sks	. &	Slurry V	/ol.	Com	ent Top*	Amount Pulled
12-1/4"	8-5/8" J-		1#	0	, (11115)	327'	<del>"</del>	Depth		of Cer		(BBL	.)	Cen	ent rop	Amount Funed
7-7/8"	5-1/2" J-		5.5#	0		5984'	-				MLITE			590'		
									430 5	0/50 F	POZ					
			-													
				+	-											
24. Tubing Size		Set (MD)	Poo	ker Depth	(MT)	Size	T Day	oth Cot (AMD)	nt	D. d.	200	0:			10:05	
2-7/8"	EOT@		1	6 5437'	(MID)	Size	Del	oth Set (MD)	Раскет	Depth (	(MD)	Size		Dept	h Set (MD)	Packer Depth (MD)
25. Produci	ng Intervals Formation			To	n	Bottom	26.	Perforation : Perforated In				Size	No. I	Talas	· · · · · · · · · · · · · · · · · · ·	Perf. Status
A) Green l			;	3945'	<u> </u>	5476'	394	5-5476'	itei vai		0.34"		75	10165		Pett. Status
B)														•••		
C) D)																
27. Acid, F	racture, Trea	itment, C	Cement S	Squeeze,	etc.						<u></u>	1		W	L	***
3945-5476	Depth Inter	val		Eroo w/	217245	# 20/40 white s	and on		Amount							
3943-3470	<u> </u>	ma		Tac W/	317243	4 20/40 Write S	sallu all	u 1790 bbis	Ligituii	ng 17	ilula, i	n 5 stage	S.			
												m 1				
28. Product	ion - Interve	1 A												<del></del>		
Date First	Test Date	Hours	Test		Oil		Water	Oil Gra		Ga			ction M			
Produced 10/5/12	10/16/12	Tested	Prod	luction	BBL		BBL	Corr. A	PI	Gr	avity	2-1/2	2" x 1∹	3/4" x 2	20' x 24' RI	HAC Pump
Choke	Tbg. Press.		24 H	lr.	56 Oil	Gas	93 Water	Gas/Oil		W	ell Statı	ıs				
Size		Press.	Rate		BBL	MCF	BBL	Ratio		Pi	RODU	ICING				
28a. Produc	tion - Inte-	el B					<u></u>									
Date First		Hours	Test		Oil		Water	Oil Gra		Ga		Produ	ction M	<b>lethod</b>		
Produced		Tested	Prod	luction	BBL	MCF	BBL	Corr. A	PI	Gr	avity					
Choke	Tbg. Press.		24 H		Oil	Gas	Water	Gas/Oil		W	ell Stati	as			_	
Size		Press.	Rate		BBL		BBL	Ratio								

*											
	uction - Inte		<b>L</b>	la is							
Date First Produced		Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Grav Corr. AP		as avity	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	w	ell Status		
	uction - Inte			1.							
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Grav Corr. AP		as ravity	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	w	ell Status		
29. Dispos	sition of Gas	(Solid, us	ed for fuel, ve	nted, etc.)	<b>'</b>		<u> </u>	· · · · · · · · · · · · · · · · · · ·			
NO MEASU	IRABLE GAS										
30. Sumn	nary of Poro	us Zones	(Include Aqui	fers):				3	1. Formation	on (Log) Markers	
Show a includi	ing depth int	zones of perval tested	porosity and c	ontents the	ereof: Cored ol open, flow	intervals and al ring and shut-in	ll drill-stem to pressures and	ests, d	BEOLOGI	CAL MARKERS	
For	nation	Тор	Bottom		Des	scriptions, Conte	ents etc			Name	Тор
		7.00	Bottom			oripilons, cond				Name	Meas. Depth
GREEN RI	VER	3945'	5476'					G	SARDEN GUI SARDEN GUI	LCH MARKER LCH 1	3526' 3720'
									GARDEN GUI POINT 3 MAR		3832' 4105'
									MRKR MRKR		4345' 4382'
									OOUGLAS CI BI-CARBONA	REEK MRKR TE	4510' 4750'
								C	B LIMESTON CASTLE PEA	K	4873' 5351'
									ASAL CARB /ASATCH	ONATE	5777' 5900'
32. Addit	tional remarl	ks (include	plugging pro	cedure):							
33. Indic	ate which ite	ms have b	een attached b	y placing	a check in th	e appropriate b	oxes:				
		_	(1 full set req	-		Geologic Repo		DST Report Other:		✓ Directional Survey	
						-			avzailabla re	ecords (see attached instructions)	*
	Name <i>(pleas)</i>		going and att ingifer Peat		nination is co	шысс япа соп		uned from all oduction Te		scords (see auached instructions)	•
	Signature	XVII	ANG					/13/2012	M II II II II II I		
Title 18 U	J.S.C. Section	in 1001 and	d Title 43 U.S	.C. Section	on 1212, make	e it a crime for a	any person kn	nowingly and	willfully to	make to any department or agen	cy of the United States any
	ed on page 3									***************************************	(Form 3160-4, page 2)



## **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 15 T9S R17E V-10-9-17

Wellbore #1

Design: Actual

## **Standard Survey Report**

10 September, 2012





Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT)

Site: Well: SECTION 15 T9S R17E V-10-9-17

Wellbore:

Wellbore #1 Actual

Local Co-ordinate Reference:

Well V-10-9-17

V-10-9-17 @ 5174.0ft (NDSI SS #2)

TVD Reference: MD Reference:

Database:

V-10-9-17 @ 5174.0ft (NDSI SS #2)

North Reference:

Survey Calculation Method:

Minimum Curvature EDM 2003.21 Single User Db

Design:

USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System: Geo Datum:

Project

US State Plane 1983 North American Datum 1983 System Datum:

Mean Sea Level

Map Zone:

Utah Central Zone

Site

From:

SECTION 15 T9S R17E, SEC 15 T9S, R17E

Site Position:

Lat/Long

Northing: Easting:

7,182,997.99 ft 2,062,000.00 ft

Latitude:

40° 1' 46.007 N

Position Uncertainty:

0.0 ft

Slot Radius:

Longitude:

109° 59' 39.695 W

Grid Convergence:

0.96 °

Well

V-10-9-17, SHL LAT: 40 02 12.64 LONG: -109 59 08.36

Well Position

+N/-S +E/-W

0.0 ft

0.0 ft

Northing: Easting:

7,185,733.50 ft 2,064,391.32 ft

Latitude: Longitude: 40° 2' 12.640 N

**Position Uncertainty** 

0.0 ft

Wellhead Elevation:

5,174.0 ft

**Ground Level:** 

109° 59' 8.360 W 5,162.0 ft

Wellbore

Wellbore #1

Magnetics

**Model Name** 

Sample Date

Declination

(°)

Dip Angle (°)

Field Strength

(nT)

IGRF2010

9/27/2011

11.24

65.80

52,251

Design

Audit Notes:

Version:

1.0

Actual

Phase:

ACTUAL

Tie On Depth:

0.0

Vertical Section:

Depth From (TVD)

(ft) 0.0 +N/-S (ft) 0,0

+E/-W (ft) 0.0

Direction (°) 306.76

Survey Program

Date 9/10/2012

From (ft)

345.0

То

(ft)

Survey (Wellbore)

**Tool Name** 

Description

5,977.0 Survey #1 (Wellbore #1)

MWD

MWD - Standard

Su	rve	1

Measured			Vertical	5 (122 <u>-2</u> 154)		Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
345.0	0.70	154.40	345.0	-1.9	0.9	-1.9	0.20	0.20	0.00
376.0	0.60	150.70	376.0	-2.2	1.1	-2.2	0.35	-0.32	-11.94
406.0	0.30	106.20	406.0	-2.4	1.2	-2.4	1.47	-1.00	-148.33
437.0	0.10	84.40	437.0	-2.4	1.3	-2.5	0.68	-0.65	-70.32
498.0	0.75	297.20	498.0	-2.2	1.0	-2.1	1.37	1.07	-241.31
529.0	1.00	300.40	529.0	-2.0	0.6	-1.7	0.82	0.81	10.32
559.0	1.10	299.00	559.0	-1.7	0.1	-1.1	0.34	0.33	-4.67
589.0	1.30	301.50	589.0	-1.4	-0.4	-0.5	0.69	0.67	8.33
620.0	1.70	307.87	620.0	-0.9	-1.1	0.3	1.40	1.29	20.55
650.0	2.30	309.50	649.9	-0.3	-1.9	1.4	2.01	2.00	5.43
680.0	3.00	315.80	679.9	0.7	-2.9	2.7	2.52	2.33	21.00
711.0	3.90	316.90	710.9	2.0	-4.2	4.6	2.91	2.90	3.55



Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT)

Site:

SECTION 15 T9S R17E

Well:

V-10-9-17

Wellbore: Design:

Wellbore #1 Actual

Local Co-ordinate Reference:

TVD Reference:

Well V-10-9-17

V-10-9-17 @ 5174.0ft (NDSI SS #2)

MD Reference: North Reference: V-10-9-17 @ 5174.0ft (NDSI SS #2)

**Survey Calculation Method:** 

Minimum Curvature

Database:

EDM 2003.21 Single User Db

irvey				en e						
Measured Depth	Inclination	Azimuth	. Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	4 1
742.0	4.10	314.20	741.8	3.6	-5.7	6.7	0.89	0.65	0.71	
772.0	4.20	315.50	771.7	5.1	-7.2	8.9	0.46	0.83	-8.71 4.33	
802.0										
	4.80	314.90	801.6	6.8	-8.9	11.2	2.01	2.00	-2.00	
833.0 863.0	5.05	314.00	832.5	8.6	-10.8	13.8	0.84	0.81	-2.90	
894.0	5.60 5.90	313,90	862.4	10.6	-12.8	16.6	1.83	1.83	-0.33	
924.0	6.00	314.90 313.85	893.2	12.7	-15.0	19.7	1.02	0.97	3.23	
			923.0	14.9	-17.2	22.7	0.49	0.33	-3.50	
955.0	6.65	312.70	953.9	17.3	-19.7	26.1	2.14	2.10	-3.71	
985.0	7.00	310.70	983.6	19.6	-22.4	29.7	1.41	1.17	-6.67	
1,016.0	7.50	307.60	1,014.4	22.1	-25.4	33.6	2.05	1.61	-10.00	
1,060.0	8.10	304.90	1,058.0	25.6	-30.2	39.6	1.60	1.36	-6.14	
1,104.0	9.20	303.80	1,101.5	29.4	-35.7	46.2	2.53	2.50	-2.50	
1,148.0	9.20	303.80	1,144.9	33.3	-41.6	53.2	0.00			
1,191.0	9.80	305.00	1,187.3	37.3	-41.6 -47.4	53.2 60.3	1.47	0.00	0.00	
1,235.0	10.10	306.20	1,230.7	41.7	-47.4 -53.6	67.9	0.83	1.40 0.68	2.79	
1,279.0	11.00	306.20	1,273.9	46.5	-60.1	75.9	2.05		2.73	
1,322.0	11.10	305.00	1,316.1	51.3	-66.8	84.2	0.58	2.05	0.00	
							0.56	0.23	-2.79	
1,366.0	11.00	303.80	1,359.3	56.0	-73.8	92.6	0.57	-0.23	-2.73	
1,410.0	11.60	303.20	1,402.5	60.8	-80.9	101.2	1.39	1.36	<del>-</del> 1.36	
1,454.0	11.90	303.40	1,445.5	65.7	-88.4	110.2	0.69	0.68	0.45	
1,498.0	11.60	301.60	1,488.6	70.5	-96.0	119.1	1.08	-0.68	<b>-4</b> .09	
1,541.0	11.60	301.00	1,530.7	75.0	-103.4	127.7	0.28	0.00	-1.40	
1,585.0	11.30	300.10	1,573.9	79.4	-110.9	136.4	0.79	-0.68	2.05	
1,629.0	11.50	301.40	1,617.0	83.9	-118.4	145.0	0.74	-0.66 0.45	-2.05	
1,673.0	11.80	303.00	1,660.1	88.6	-125.9	153.9	1.00	0.45	2.95	
1,716.0	12.00	302.50	1,702.2	93.4	-133.3	162.7	0.52	0.66	3.64 -1.16	
1,760.0	12.00	301.50	1,745.2	98.3	-141.1	171.9	0.47	0.00	-1.16	
1,804.0	12.00	300.20	1,788.2							
1,848.0	12.20	300.20	•	103.0	-149.0	181.0	0.61	0.00	-2.95	
1,892.0	12.30	300.30	1,831.3	107.6	-156.9	190.1	0.46	0.45	0.23	
1,936.0	12.50		1,874.3	112.4	-165.0	199.4	0.37	0.23	1.36	
1,980.0	12.70	299.40	1,917.2	117.1	-173.1	208.8	0.86	0.45	-3.41	
	12.70	299.40	1,960.2	121.8	-181.5	218.3	0.45	0.45	0.00	
2,024.0	12.50	299.60	2,003.1	126.5	-189.8	227.8	0.47	-0.45	0.45	
2,068.0	12.50	301.90	2,046.1	131.4	-198.0	237.3	1.13	0.00	5.23	
2,111.0	13.00	307.20	2,088.0	136.8	-205.8	246.8	2.96	1.16	12.33	
2,155.0	13.65	311.80	2,130.8	143.3	<i>-</i> 213.6	256.9	2.83	1.48	10.45	
2,199.0	13.60	314.30	2,173.6	150.3	-221.2	267.2	1.34	-0.11	5.68	
2,243.0	13.20	313.10	2,216.4	157.4	-228.6	277.3	1.11			
2,286.0	13.60	312.40	2,258.2	164.1	-226.6 -235.9	277.3 287.2	1.11	-0.91	-2.73	
2,330.0	13.30	310.90	2,301.0	170.9	-235.9 -243.5	287.2 297.4		0.93	-1.63	
2,374.0	12.90	308.10	2,343.9	170.9	-243.5 -251.2	297.4 307.4	1.05 1.70	-0.68	-3.41	
2,418.0	12.90	306.70	2,386.8	183.2	-251.2	307. <del>4</del> 317.2	0.71	-0.91	-6.36 -3.18	
								0.00	-3.18	
2,462.0	12.40	305.40	2,429.7	188.9	-266.8	326.8	1.31	-1.14	-2.95	
2,505.0	11.70	301.80	2,471.7	193.9	-274.3	335.8	2.39	-1.63	-8.37	
2,549.0	11.80	303.60	2,514.8	198.7	-281.8	344.7	0.86	0.23	4.09	
2,593.0	11.70	306.10	2,557.9	203.8	-289.2	353.7	1.18	-0.23	5.68	
2,637.0	12.30	306.30	2,600.9	209.3	-296.6	362.8	1.37	1.36	0.45	
2,680.0	12.80	305.10	2,642.9	214.7	-304.2	372.2	1.31	1.16	-2.79	
2,724.0	12.10	303.00	2,685.9	220.0	-312.0	381.6	1.89	-1.59	-2.79 <b>-</b> 4.77	
2,768.0	12.20	306.90	2,728.9	225.3	-319.6	390.9	1.88	0.23	8.86	
2,812.0	13.20	311.50	2,771.8	231.4	-327.1	400.6	3.23	2.27	10.45	
2,855.0	14.15	311.80	2,813.6	238.2	-334.7	410.7	2.22	2.21	0.70	
•										
2,899.0	13.20	308,80	2,856.4	244.9	-342.6	421.1	2.69	<b>-</b> 2.16	-6.82	



Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT)

Site:

SECTION 15 T9S R17E

Well:

V-10-9-17

Wellbore: Design:

Wellbore #1 Actual

Local Co-ordinate Reference:

TVD Reference:

Well V-10-9-17

MD Reference:

V-10-9-17 @ 5174.0ft (NDSI SS #2) V-10-9-17 @ 5174.0ft (NDSI SS #2)

North Reference:

Survey Calculation Method:

Minimum Curvature

i i Sala della	: Actu	Andrew Company of the Company	Secretaria de la constitución de		Database:	Bank Kill Free	seen to be a book	EDM 2003.21 Sir	rance of the same	
Survey									Marketan i gradini is Marketan i Santan	
	Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
	2,987.0	14.10	308.00	2,941,9	257.7	-358.8	441.6	1.59	1.59	0.00
	3,031.0	14.30	308.10	2,984.6	264.3	-367.3	452.4			0.00
	3,074.0	14.50	307.60	3,026.2	270.9	-375.7	463.1	0.46	0.45	0.23
						-015.1	403.1	0.55	0.47	-1.16
	3,118.0	14.10	305.50	3,068.9	277.3	-384.4	474.0	1.49	-0.91	-4.77
	3,162.0	14.20	304.80	3,111.5	283.5	-393.2	484.7	0.45	0.23	-1.59
	3,206.0	14.90	305.50	3,154.1	289.9	-402.3	495.8	1.64	1.59	1.59
	3,250.0	14.80	305.20	3,196.6	296.4	-411.5	507.1	0.29	-0.23	-0.68
	3,293.0	14.80	308.30	3,238.2	303.0	-420.3	518.0	1.84	0.00	7.21
	3,337.0	14.60	307.40	3,280.8	309.8	-429.1	529.2	0.69	-0.45	-2.05
	3,381.0	14.80	306.50	3,323.3	316.6	-438.0	540.4	0.69	0.45	-2.05
	3,425.0	14.15	305.10	3,365.9	323.0	-446.9	551.4	1.68	-1.48	-3.18
	3,469.0	13.60	303.70	3,408.6	329.0	-455.6	561.9	1.46	-1.25	-3.18
	3,512.0	12.80	306.90	3,450.5	334.6	-463.6	571.7	2.52	-1.86	7.44
	3,556.0	12.10	304.80	3,493.5	340.2	-471.3	581.2	1.89	-1.59	-4.77
	3,600.0	11.90	304.40	3,536.5	345.4	-478.9	590.3	0.49	-0.45	-0.91
	3,644.0	11.65	303.70	3,579.6	350.4	-486.3	599.3	0.65	-0.57	-1.59
	3,688.0	11.80	305.70	3,622.7	355.5	-493.7	608.2	0.98	0.34	4.55
	3,731.0	11.60	304.75	3,664.8	360.5	-500.8	617.0	0.65	-0.47	-2.21
	3,775.0	11.65	306.70	3,707.9	365.7	-508.0	625.8	0.90	0.11	4.43
	3,819.0	11.40	306.70	3,751.0	371.0	-515.0	634.6	0.57	-0.57	0.00
	3,863.0	11.40	309.60	3,794.1	376.3	-521.9	643.3	1.30	0.00	6.59
	3,907.0	11.00	308.10	3,837.3	381.7	-528.5	651.8	1.12	-0.91	-3.41
	3,950.0	11.25	310.50	3,879.5	386.9 ←	-534.9	660.1	1.22	0.58	5.58
	3,994.0 4,038.0	11.20 11.60	309.50 308.20	3,922.6 3,965.8	392.4 397.9	-541.5 -548.3	668.7	0.46	-0.11	-2.27
	4,082.0	11.20	306.40	4,008.9	403.2	-546.3 -555.2	677.4 686.1	1.08	0.91	-2.95
	4,126.0	11.60	305.30	4,052.0	408.3	-562.2	694.8	1.22 1.03	-0.91 0.91	-4.09 3.50
	4,169.0	11.10	303.65	4,094.2	413.1	-569.2	703.2	1.39	-1.16	-2.50 -3.84
	4,213.0	12.10	307.70	4,137.3	418.2	-576.4	712.1	2.93	2.27	9.20
	4,257.0	12.70	308.05	4,180.3	424.0	-583.8	721.5	1.37	1.36	0.80
	4,300.0	12.40	307.90	4,222.2	429.8	-591.2	730.8	0.70	-0.70	-0.35
	4,344.0	12.60	310.00	4,265.2	435.8	-598.6	740.4	1.13	0.45	4.77
	4,388.0	12.40	309.50	4,308.2	441.8	-605.9	749.9	0.52	-0.45	-1.14
	4,432.0	13.00	310.60	4,351.1	448.1	-613.3	759.5	1.47	1.36	2.50
	4,476.0	12.70	310.15	4,394.0	454.4	-620.8	769.3	0.72	-0.68	-1.02
	4,520.0	13.20	309.10	4,436.9	460.7	-628.4	779.1	1.26	1.14	-2.39
	4,564.0	12.60	306.90	4,479.7	466.8	-636.1	789.0	1.76	-1.36	-5.00
	4,608.0	12,90	304.40	4,522.7	472.4	-644.0	798.7	1.43	0.68	-5.68
	4,651.0	12.40	303.30	4,564.6	477.7	-651.8	808.1	1.29	-1.16	-2.56
	4,695.0	12.70	305.30	4,607.6	483.0	-659.7	817.6	1.20	0.68	4.55
	4,739.0	11.90	303.60	4,650.6	488.3	-667.4	827.0	2.00	-1.82	-3.86
	4,783.0	12.20	305.60	4,693.6	493.6	-675.0	836.2	1.17	0.68	4.55
	4,827.0	12.00	304.40	4,736.6	498.9	-682.6	845.4	0.73	-0.45	-2.73
	4,870.0	11.70	302.30	4,778.7	503.7	-689.9	854.2	1.22	-0.70	-4.88
	4,914.0	11.60	300.00	4,821.8	508.3	-697.5	863.0	1.08	-0.23	-5.23
	4,939.5	11.83	301.65	4,846.8	511.0	-702.0	868.2	1,59	0.90	6.45
	V-10-9-17 TG									
	4,958.0	12.00	302.80	4,864.9	513.0	-705.2	872.0	1.59	0.93	6.24
	5,002.0	12.30	302.70	4,907.9	518.0	-713.0	881.2	0.68	0.68	-0.23
	5,046.0	12.40	301.60	4,950.9	523.0	-721.0	890.6	0.58	0.23	-2.50
	5,089.0	12.40	299.10	4,992.8	527.7	-728.9	899.8	1.25	0.00	-5.81
	5,133.0	12.10	298.00	5,035.8	532.1	-737.1	909.0	0.86	-0.68	-2.50
	5,177.0	12.70	298.40	5,078.8	536.6	-745.5	918.4	1.38	1.36	0.91
	5,221.0	12.80	301.10	5,121.7	541.4	-753.9	928.0	1.37	0.23	6.14



Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT)

Site: Well: SECTION 15 T9S R17E V-10-9-17

Wellbore: Design:

Wellbore #1

Actual

Local Co-ordinate Reference:

TVD Reference: MD Reference:

Well V-10-9-17

V-10-9-17 @ 5174.0ft (NDSI SS #2)

V-10-9-17 @ 5174.0ft (NDSI SS #2)

North Reference:

**Survey Calculation Method:** 

Minimum Curvature

Database: EDM 2003.21 Single User Db

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,264.0	12.30	302.40	5,163.7	546.3	-761.8	937.3	1.34	-1.16	3.02
5,308.0	11.80	302.70	5,206.7	551.3	-769.6	946.5	1.15	-1.14	0.68
5,352.0	11.10	301.90	5,249.9	555.9	-777.0	955.2	1.63	-1.59	-1.82
5,396.0	11.30	301.70	5,293.0	560.5	-784.2	963.7	0.46	0.45	-0.45
5,440.0	12.30	307.83	5,336.1	565.6	-791.6	972.7	3.64	2.27	13.93
5,484.0	12.90	310.80	5,379.0	571.7	-799.0	982.3	2.01	1.36	6.75
5,528.0	12.70	312.00	5,421.9	578.1	-806.3	992.0	0.76	-0.45	2.73
5,571.0	11.70	310.20	5,464.0	584.1	-813.2	1,001.0	2.49	-2.33	-4.19
5,615.0	11.10	308.90	5,507.1	589.6	-819.9	1,009.7	1.48	-1.36	-2.95
5,659.0	10.40	307.20	5,550.3	594.7	-826.3	1,017.9	1.75	-1.59	-3.86
5,703.0	9.80	305.40	5,593.6	599.3	-832.5	1,025.6	1.54	-1.36	-4.09
5,747.0	9.10	303.80	5,637.1	603.4	-838.5	1,032.9	1.70	-1.59	-3.64
5,790.0	8.35	301.10	5,679.6	606.9	-844.0	1,039.4	1.99	-1.74	-6.28
5,834.0	7.65	299.20	5,723.1	610,0	-849.3	1,045.4	1.70	-1.59	-4.32
5,878.0	7.20	298.70	5,766.8	612.7	-854.3	1,051.1	1.03	-1.02	-1.14
5,921.0	6.30	293.50	5,809.5	614.9	-858.8	1,056.0	2.53	-2.09	-12,09
5,923.0	6.20	292.50	5,811.4	615.0	-859.0	1,056.3	7.39	-5.00	-50.00
5,977.0	6.20	292.50	5,865.1 1 4	617.3 🗻	-864.4	1,061.9	0.00	0.00	0.00

Checked By:	Approved By:	Date:	
		Date.	



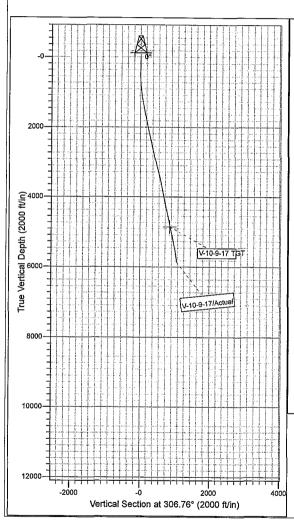
Project: USGS Myton SW (UT) Site: SECTION 15 T9S R17E Well: V-10-9-17

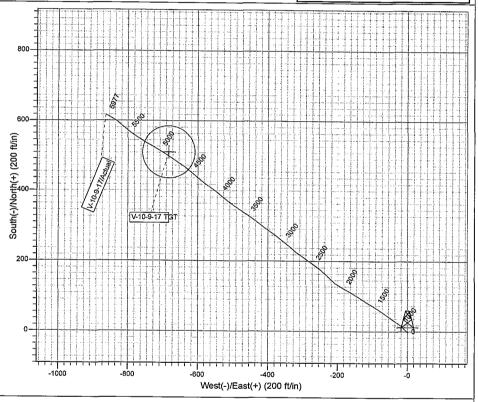
Well: V-10-9-17
Wellbore: Wellbore #1
Design: Actual



Azimuths to True North Magnetic North: 11.24°

Magnetic Field Strength: 52251.4snT Dip Angle: 65.80° Date: 9/27/2011 Model: IGRF2010





Design: Actual (V-10-9-17/Wellbore #1)

Created By: Sarah Well-

Date:

10:37, September 10 201

THIS SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA